BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-2RC-135,
Volume 1

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Flying Operations

RC/OC/WC/TC-135--AIRCREW TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Capt Michael R. Strachan)
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This volume implements AFPD 11-2, *Aircraft Rules and Procedures*; AFPD 11-4, *Aviation Service*; and AFI 11-202V1, *Aircrew Training*. This instruction applies to all aircrew operating the RC/OC/WC/TC-135 and establishes the minimum Air Force standards for training and qualifying personnel performing duties in the RC/OC/WC/TC-135. This instruction does not apply to the Air National Guard or Air Force Reserve Command. MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOOT, through HQ ACC/XOFR, for approval prior to publication IAW AFPD 11-2, paragraph 4.2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOOT, HQ ACC/XOFR, and the user MAJCOM/DRU/FOA and NGB offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *The Air Force Publications Management Program*, paragraph 3.66 (periodic review). See chapter 1 of this instruction for guidance on submitting comments and suggesting improvements to this publication.

This instruction requires the collection or maintenance of information protected by the Privacy Act of 1974. The authority to collect and maintain the records prescribed in this instruction are Title 37 USC 301a, Incentive Pay; Public Law 92-204 (Appropriations Act for 1973), Section 715; Public Law 93-570 (Appropriations Act for 1974); Public Law 93-294 (Aviation Career Incentive Act of 1974); Air Force Instruction 11-401, *Flight Management*; and E.O. 9397, *Numbering System for Federal Accounts Relating to Individual Persons*. System of records notice F011 AF XO A, Air Force Operations Resource Management System (AFORMS) applies. The reporting requirements in this instruction are exempt from licensing in accordance with paragraph 2.11.10 of AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*.

Maintain and dispose of all records created as a result of prescribed processes in this instruction in accordance with AFMAN 37-139, *Records Disposition Schedule*.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision reorganizes the entire document into crew position specific chapters. It adds AIA personnel training requirements. It adds pilot procedures for special maneuvers and incorporates specialized navigation training formerly listed in AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures.* This volume also establishes requirements for the new 338 CTS FTU.

This volume contains references to the following field (subordinate level) publications and forms which, until converted to departmental level publications and forms, may be obtained from the respective MAJCOM publication office:

Publications: ACCI 11-301, *Aircrew Life Support Program*; ACCI 11-450, *Orientation Flight Program*; ACCI 11-464 *Training Records and Performance Evaluation in Formal Flying Training Programs*; ACCI 33-151, *Combat Crew Communication Support Requirements*; ACCI 36-2250, *The Operations Training and Training Development Program.*

Chapter 1

GENERAL GUIDANCE

1.1. Training guidance . This regulation provides guidance for the RC/OC/WC/TC-135. This instruction is divided into five main parts.

1.1.1. Chapter 1 contains general guidance pertaining to all crewmembers. This chapter is used for policy and management of the training program and used mainly by operations and training flight; however, it also describes some aircrew member responsibilities.

1.1.2. Chapter 2 defines the formal training program. It includes general guidance on the various qualification programs standard for each crew position. This chapter combines Phase I (initial qualification training) and Phase II (mission qualification training) into a single phase, mission qualification training program.

1.1.3. Chapter 3 contains general guidance on continuation training basic to each crew position. It includes explanations of the ready aircrew program (RAP) and some common ground training events.

1.1.4. Chapters 4 – 10 are the aircrew specific chapters. Each of these chapters contains training objectives and requirements specific to each particular crew position.

1.1.5. Chapter 11 and attachments 1-4 include the training systems user's guide, definitions, course descriptions, aircrew verification guide, and the training shortfall report.

1.2. Responsibilities:

1.2.1. HQ ACC/XO is the agency responsible for this instruction IAW AFPD 11-2, *Aircraft Rules and Procedures*. HQ ACC/XO will:

1.2.1.1. Chair annual ACC Realistic Training Review Boards (RTRBs) to review ground and flying training requirements/programs for Combat Air Forces (CAF) units. RTRB participants will include applicable ACC representatives.

1.2.1.2. Process all change requests.

1.2.2. Air Intelligence Agency (AIA) is the agency responsible and cognizant authority for all linguistic/cryptologic programs and its associated maintenance on the RC-135. AIA's cryptologic flying training requirements and associated programs as related to this AFI can be found in Chapters 8 and 9 of this document. Personnel assigned to units under the 67 IW are only responsible for Chapter 8 and 9. HQ AIA will provide a supplement to this regulation to identify other paragraphs and sections appropriate for AIA crew training requirements.

1.2.3. All applicable major commands (MAJCOMs) will, as applicable:

1.2.3.1. Determine training requirements to meet expected unit tasking.

1.2.3.2. Forward all MAJCOM/FOA/DRU supplements to HQ ACC/XOFR, who in turn will forward to HQ USAF/XOOT for approval. Provide HQ USAF/XOOT and all MAJCOM XOs a copy of approved supplements to this instruction.

1.2.3.3. Review subordinate unit supplemental instructions and supplemental training programs annually.

1.2.3.4. Review instructional texts biannually.

1.2.3.5. Review subordinate unit training programs annually.

1.2.3.6. Standardize aircrew flying training requirements.

1.2.3.7. Approve all FTU courses and syllabi and act as the approval authority for any changes.

1.2.3.8. Determine the number of training quotas needed to meet operational requirements. 338 CTS determines the formal school capacity.

1.2.3.9. Provide policy and guidance in order for units to develop their respective training programs.

1.2.4. Wings/groups will:

1.2.4.1. Develop programs to ensure training objectives are met. Assist subordinate units in management of training programs and provide necessary staff support.

1.2.4.2. Convene a Training Review Panel (TRP). The OG/CC will determine frequency, format and content of the meetings. The TRP should review staff and aircrew management actions necessary to complete the squadron's flight and ground training programs.

1.2.4.3. Establish procedures with the servicing military personnel flight (MPF) for individual counseling and personnel system updates for the active duty service commitment (ADSC) incurred. Training conducted according to AFI 11-2RC-135V1, *RC/OC/WC/TC-135 Aircrew Training*, that is intended to result in initial mission qualification, requalification, or upgrade training in a crew position may result in an ADSC per AFI 36-2107, *Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC)*, and the education and training course announcement (ETCA).

1.2.4.4. Review programs and manning position designations annually.

1.2.4.5. Attach each API-6/8 flyer to a flying squadron and designate an appropriate training level. Designate the training level to which each API-6 flyer will train. Upon request, provide HQ ACC/XOF with a list of Basic Mission Capable (BMC) and Combat Mission Ready (CMR) designated manning positions NLT the beginning of each training cycle.

1.2.4.6. Forward supplemental instructions and supplemental training programs to HQ ACC/XOFR. Review supplements annually.

1.2.4.7. Identify training shortfalls that adversely impact combat capability. Units are required to submit anticipated shortfall reports each quarter to HQ ACC/XOF (info copy to 12AF/DO) due 31 Jan, 30 Apr, 31 Jul and a summary shortfall report at the end of the training cycle due 31 Oct. Prior to submitting the annual report, units are reminded to prorate incomplete training, as detailed in chapter 3 and the RAP Tasking Message, if applicable. See Attachment 4, *Training Shortfall Report* for training report format. This report may be submitted on the HQ ACC/XOF homepage.

1.2.4.8. Conduct progress reviews. Notify the gaining unit's commander when a student's progress during qualification training is considered unsatisfactory by the 338 CTS.

1.2.4.8.1. The 55 OG/CC will determine whether to continue, modify, terminate training, or conduct a Flight Evaluation Board (FEB) on receiving documentation and recommendations from the 338 CTS and the gaining unit.

1.2.4.8.2. Notify HQ ACC/XOFR when an FEB is recommended.

1.2.5. SQ/CCs will:

1.2.5.1. Ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned/attached aircrew.

1.2.5.2. Ensure review of training and evaluation records of newly-assigned aircrew and those completing formal training to determine the training required for them to achieve basic mission capable (BMC) or combat mission ready (CMR) and to ensure provisions of this instruction have been met.

1.2.5.3. Ensure Ready Aircrew Program (RAP) missions are oriented to developing basic combat skills or practicing tactical employment simulating conditions anticipated in the unit mission. Provide guidance to ensure only effective RAP missions are logged as RAP sorties.

1.2.5.4. Determine missions/events in which individual BMC aircrew will maintain qualification versus familiarization.

1.2.5.5. Determine utilization of BMC aircrew.

1.2.5.6. Determine how many and which BMC and CMR aircrew will carry special capabilities/ qualifications, e.g. GRID/Celestial qualification.

1.2.5.7. Identify levels of supervision needed to accomplish required training.

1.2.5.8. Assist the wing/group in developing training programs.

1.2.5.8.1. Monitor individual assigned/attached aircrew currencies and requirements.

1.2.5.8.2. Ensure aircrew members participate only in sorties, events, and tasks for which they are adequately prepared, trained, and current.

1.2.5.8.3. Review qualifications and training requirements of squadron-assigned flight surgeons (FS) and determine appropriate flight restrictions.

1.2.5.8.4. Determine which crewmembers will receive specialized training/certification.

1.2.5.8.5. Check quality of training accomplished, identify deficiencies, and advise squadron staff of additional training needs.

1.2.6. Flight CCs will:

1.2.6.1. Monitor individual assigned/attached aircrew currencies and requirements.

1.2.6.2. Ensure aircrew members only participate in sorties, events, and tasks for which they are adequately prepared, trained, and current.

1.2.6.3. Identify areas where additional training is needed and direct training accordingly.

1.2.6.4. Ensure mission objectives are pre-briefed, debriefed, and evaluated to determine successful accomplishment.

1.2.7. Individual aircrew members will:

1.2.7.1. Hand-carry all available training records to assist the gaining unit in assessing qualifications and training requirements.

1.2.7.2. Be responsible for completion of training requirements and currencies within the guidelines of this instruction.

1.2.7.3. Correctly log training events per AF, ACC, and local directives for submission to the squadron operations system management (SOSM) section for input into AFORMS.

1.2.7.4. Participate only in ground and flying activities they are qualified and current to conduct unless under the direct supervision of a qualified instructor/evaluator.

1.2.8. The SOSM section will ensure all training and qualifications status are correctly documented and tracked in AFORMS.

1.2.9. Formal school aircrew training system (ATS) contractor will develop, update, and maintain courseware, and perform task and media analysis consistent with the applicable ATS contract.

1.3. Processing Changes:

1.3.1. Refer recommended changes to this instruction via email or by sending to HQ ACC/XOFR, 205 Dodd Blvd, Suite 101, Langley AFB VA 23665-2789, on an AF Form 847, **Recommendation for Change of Publication.** The 67 IW will forward changes to ACC/XOFR through HQ AIA/DO.

1.3.2. HQ ACC/XOFR will:

1.3.2.1. Coordinate all changes to the basic instruction with ACC and all applicable MAJCOM/XOs.

1.3.2.2. Address time sensitive changes by immediate action message.

1.3.2.3. Forward recommended changes to HQ USAF/XOOT for HQ USAF/XO approval.

1.3.3. Determine training requirements for the subordinate units. This includes making changes, additions, or deletions to this instruction at anytime.

1.4. Training progression. Aircrew training is designed to progress aircrew from initial mission qualification training (IMQT), difference qualification training (DQT) or requalification training (RQT), to continuation training (CT). Training limitation times are listed in table 1.1.

Table 1.1. Training Time Limitations (Calendar Days).

TRAINING	Pilot	Navigator	EWO	IMT
Initial Mission Qualification	140	140	200	200
Difference Qualification	120	120	180	180
Requalification	120	120	180	180
Instructor Upgrade	60	60	60	60
Tactical Coordinator Upgrade			60	

Notes:

1. Training time starts with the first significant training event (a training event directly contributing to qualification and upgrade: computer-based training (CBT) lesson, part task trainer (PTT), weapon system trainer (WST), ground training, flight, etc.), or 45 days after being attached or assigned to the unit.

2. Failure to complete training within the specified time limit requires notification through channels to HQ ACC/XOFR.

1.4.1. Mission Qualification Training (MQT). This training includes IMQT, DQT and RQT to initially qualify or requalify aircrew in a specific position and flying duties as related to a particular MDS aircraft's mission. Completion of one of these MQT programs is a pre-requisite for BMC and CMR.

1.4.2. Continuation Training (CT). There are two aspects of CT. The first is basic proficiency training required to ensure safe operation of the aircraft. The second consists of specific mission-related training (RAP profiles) required to accomplish the unit's assigned missions.

1.4.3. Ready Aircrew Program (RAP). RAP is the CT program designed to focus training on capabilities needed to accomplish a unit's basic tasked missions. Aircrew members will receive training in all MDS aircraft they are qualified in and will be assigned to either a CMR or a BMC position in the unit.

1.4.3.1. Combat Mission Ready (CMR). A CMR crewmember is qualified and proficient in all of the primary missions tasked to their unit or weapon system. CMR aircrew will maintain proficiency and qualification in all core missions of the MDS they are assigned to or attached. Failure to complete this training or maintain these currencies results in regression to Non-CMR (N-CMR) status. While N-CMR, aircrew may perform missions (including exercises, contingencies and SRO sorties) in which they are current, qualified, and either familiar or proficient, similar to BMC aircrew.

1.4.3.2. CMR Positions . All API-1/2 positions, flying SQ/CC, and SQ/DO positions will be designated as CMR positions. Other staff crewmembers at the 82 RS and the 95 RS (including 95 RS, Det. 1) will normally be designated API-6 and maintain BMC rates. The squadron commander or the 55 OG/CC may increase training currency requirements for any crewmembers above the CMR/BMC rate to meet training requirements for any mission tasking. The 55 OG/CC may designate other API-6 positions within the wing as CMR. (Exception: If a unit is over-manned, the SQ/CC may elect to train the front line of their Unit Manning Document (UMD) API-1/2s to CMR and designate the overage BMC. In this case, priority should be given to inexperienced crewmembers with at least 50%, if available, designated CMR).

1.4.3.3. Basic Mission Capable (BMC). A crewmember qualified and familiar in all core missions of the MDS to which they are assigned or attached. They may also maintain proficiency and qualification in some of the unit's other core missions. For those missions in which they maintain familiarization only, BMC aircrew must be able to attain proficiency and qualification in 30 days or less. BMC aircrew members accomplish all mission-related ground training designated by their attached SQ/CC. BMC aircrew may deploy and may participate in any mission for which they are proficient and qualified, without additional training. The SQ/CC will determine if additional training is required for BMC crewmembers prior to each deployment. Failure to complete BMC required training results in regression to Non-BMC (N-BMC) status.

1.4.3.4. BMC Positions . All other wing aircrew positions not identified in paragraph 1.4.3.2 are designated BMC positions. BMC designations are assigned to aircrew who have a primary job performing wing supervision or staff functions that directly support the flying operation. However, these aircrew members are required to provide additional sortie generation capability, either in lieu of, or in addition to, the personnel assigned to the flying squadrons.

1.4.3.5. N-CMR/N-BMC. Aircrew members that regress to N-CMR/N-BMC status will comply with chapter 3, regression

1.4.3.6. Specialized Training. This is additional training that may be identified to meet unforeseen tasking that would require specialized training, e.g. cell formation. It may not be required by every aircrew member. Specialized training may consist of some continuation training events. Specialized training is accomplished after an aircrew is assigned CMR/BMC status, and is in addition to CMR/BMC requirements. Aircrew in CMR or BMC positions may hold special capabilities and qualifications as long as additional training requirements are accomplished.

1.4.4. Aircrew members completing the BAQ syllabus will complete training necessary to initially qualify in a basic flying position without regard to the MDS mission. BAQ is not a long-term qualification status except for general officers above the wing level. Waiver authority for any crewmember (other than general officers) to remain BAQ will be HQ ACC/XOF.

1.5. Training Concepts and Policies:

1.5.1. Units will design training programs to achieve the highest degree of combat readiness consistent with flight safety and resource availability. Training must balance the need for realism against the expected threat, aircrew capabilities, and safety. This instruction provides training guidelines and policies to be used with operational procedures specified in applicable flight publications.

1.5.2. Training missions will be designed to achieve combat capability in squadron tasked roles, maintain proficiency, and enhance mission accomplishment and safety. RAP training missions should emphasize either basic combat skills or scenarios that reflect procedures and operations based on employment plans, location, current intelligence, and opposition capabilities. Crewmembers will practice procedures/actions applicable to combat scenarios or reconnaissance operations (e.g., appropriate use of code words, authentication procedures, combat tactics, safe recovery procedures, tactical deception, in-flight reports, threat reactions, an intelligence briefing and debriefing).

1.5.3. ACC Training Support Squadron (HQ ACC/TRSS) will develop and validate training programs when/where tasked by the HQ ACC/XO. Other MAJCOMs may submit requests for training program support to the HQ ACC/XO. If validated, these requests will be prioritized and tasked to ACC/TRSS. These syllabi will be approved by the OG/CC and submitted to ACC/TRSS for coordination and ACC approval.

1.5.4. The SQ/CC determines the level of supervision necessary to accomplish the required training. If the mission objectives include introduction to tasks or instruction to correct previous discrepancies, then an instructor may be required. Use flight evaluators and instructors for any phase of training to capitalize on their expertise and experience.

1.5.4.1. SEFEs will not evaluate students with whom they have flown 50% of the qualification/upgrade training or those they recommended for qualification/upgrade flight evaluation without written 55 OG/CC approval.

1.5.4.2. Instructors will comply with the requirements of this instruction. All squadron level instructors should be CMR with the exception of staff instructors at 55WG forward operating locations.

1.5.4.2.1. An instructor must supervise the following personnel when performing aircrew duties.

1.5.4.2.1.1. All non-current aircrew members.

1.5.4.2.1.2. All aircrew members in initial, difference, upgrade, or requalification flying training.

1.5.4.2.1.3. Unqualified crewmembers and senior officers as defined in AFI 11-202V1, *Aircrew Training*, and any other staff personnel the WG, OG, or SQ/CCs designate as required to fly with an instructor.

1.5.4.2.1.4. For unqualified, non-current, or senior officer pilots, the instructor pilot must be at a set of controls during critical phases of flight, or when an individual is regaining currency or qualification in specific events.

1.5.4.3. Every attempt should be made to ensure instructor continuity for crewmembers in initial mission qualification, requalification, difference training, and upgrade training. If the number of instructors exceeds three (flight deck) or five (EWO/IMT/SMT), document the fact with a memo for record in the individual's training folder and send a courtesy copy of the memo to HQ ACC/XOFR. **NOTE:** Squadron commanders and operations officers will not be included in this limitation.

1.5.5. The aircrew training cycle is 12 months - 1 October through 30 September. Units will complete training requirements during the appropriate training cycle.

1.6. Multiple Qualification

1.6.1. All RC/OC/WC/TC–135 aircraft are considered the same series aircraft and do not require MAJCOM XO authorization for multiple qualification. However, due to the large number of variable configurations and missions of the aircraft operated by the 55WG, the 55 OG/CC must approve all crewmembers chosen to qualify in more than one mission aircraft. The number of crewmembers authorized to qualify in more than one aircraft will be kept to a minimum to maintain operational readiness. Flight accomplishments for individuals qualifying in more than one mission aircraft are not authorized until aircraft assignment is updated in AFORMS through the appropriate host operations system manager (HOSM) office.

1.6.2. Multiple qualification is authorized as follows and does not require multiple qualification authorization when aircraft are considered the same MDS. The SQ/CC must determine if variations in systems would warrant further limitations.

1.6.2.1. RC-135U/V/W/S and TC-135W/S are considered the same MDS for pilots and navigators. The RC-135R is used to describe the RC/TC-135 with TCTO (R) – 509.

1.6.2.2. RC-135V/W are considered the same MDS for EWO and IMT.

1.6.2.3. WC-135W and OC-135 are considered the same MDS for pilots and navigators.

1.6.2.4. WC-135C is considered a separate MDS for pilots and navigators and requires difference academic/flight course and flight evaluation. Pilots and navigators will be graded according to AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria* and MAJCOM directives.

1.6.3. Qualification in the RC-135R for pilots and navigators requires difference qualification training and a flight evaluation. Navigators will receive a difference academic course as a minimum.

1.6.4. Qualification in the RC-135R with the avionics modernization program (AMP) modification requires difference qualification training and a flight evaluation. Navigators will receive a difference academics course and training in the ATD as a minimum.

1.6.5. 338 CTS instructors and OGV evaluators that complete the faculty training course (FTC), the appropriate flight evaluation(s), and receive 338 CTS/CC approval are authorized multiple qualification in all 55WG, –135 aircraft.

1.6.6. Wing Commanders should qualify in only one of their wing's aircraft (preferably in their wing's predominant aircraft). Either the 55 WG/CV or 55 OG/CC should qualify in the wing's other aircraft (not the aircraft selected by the 55 WG/CC). See ACCI 11-450, *Orientation Flight Program* for policy on Senior Supervisor Familiarization Flights.

1.6.7. Pilot transition currencies and pilot/navigator air refueling currencies can be logged in any -135 MDS. Aircrew will comply with all other currency requirements for each aircraft.

1.7. Training Records and Reports:

1.7.1. Units will maintain crewmember records for individual training and evaluations IAW:

1.7.1.1. AFI 11-202V1, *Aircrew Training.*

1.7.1.2. AFI 11-202V2, *Aircrew Standardization/Evaluation Program*.

1.7.1.3. AFI 11-401, *Flight Management.*

1.7.1.4. AFMAN 37-139, *Records Disposition Schedule*.

1.7.1.5. ACCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs*.

1.7.1.6. Appropriate MAJCOM directives.

1.7.2. Track the following information for all aircrew members (as applicable):

1.7.2.1. Ground training.

1.7.2.2. Requirements and accomplishment of individual sorties, RAP sorties, sortie types, and events cumulatively for the training cycle.

1.7.2.3. RAP sortie requirements and accomplishment using 1-month/3-month running totals for lookback.

1.7.2.4. Currencies.

1.8. Training Folder Requirements. A training folder will be initiated for all qualification, upgrade, and additional training directed by the squadron commander or a flight examiner. The training folder will include approved Air Force forms for all training reports, other approved reports, all certifications, waivers, and other applicable records unit training managers desire to keep to establish a historical record of the individual's ability. The training documents will be placed in reverse chronological order with the most recent on top.

1.8.1. Formal school records will be mailed or hand-carried by the individual to the gaining unit for review and incorporation into the individual's training folder.

1.8.2. Crewmembers who PCS or PCA will hand-carry their training folders to the gaining unit. Any incomplete training will be clearly identified on appropriate forms.

1.9. Training Folder Review: The SQ/CC or designated representative will conduct an operations review of active training folders prior to a flight evaluation that is needed to complete the training program (NA for formal school training). Annotate the review in the student's folder.

1.10. Training Period Review. Instructors will review training folders prior to each training period (flight or simulator) to develop a training plan. After each period, instructors will document training in sufficient detail to accurately assess student performance and make recommendations for subsequent training. Instructors will make a recommendation for an in-flight evaluation after the student satisfactorily completes all required training. Students will review and initial training records after each training period.

1.11. History of Training and Documentation Procedures: The flight evaluation folder (FEF) has basic source documents which provide a current history of each individual's flying qualification IAW AFI 11-202V2, *Aircrew Stan/Eval Program*, AFI 11-2RC-135V2, *RC/OC/WC/TC Aircrew Evaluation Criteria*, and appropriate MAJCOM supplement.

1.11.1. Include all certifications and special mission qualifications not annotated on AF Form 8, **Certificate of Aircrew Evaluation**, (e.g. SIOP certification) in Section I of the FEF. Place this information under the AF Forms 942, **Record of Evaluation** using AF Forms 1381, **USAF Certification of Aircrew Training**. Do not replicate the AF Form 1381 for the purpose of adding a required entry.

1.11.2. Units will maintain training folders on each aircrew member. Units may keep electronic or paper copies of the training history. See AFMAN 37-139 for additional information.

1.12. Intra-command and inter-command transfer of aircrews. Validated training completed prior to transfer will be honored by the gaining organization and will be used to determine the appropriate training phase where the newly assigned aircrew member is placed. Aircrew personnel qualified in the same MDS are considered qualified in that equipment throughout the force when used for the same mission. For intra-command transfers and exchange officers, instructor training and qualifications may be accepted at the discretion of the gaining unit commander.

1.13. Aircrew Utilization Policy:

1.13.1. Commanders will ensure that wing/group aircrew members (API-1/2/6) fill authorized positions IAW unit manning documents and that crewmember status is properly designated. The overall objective is that aircrew members perform combat-related duties. Supervisors may assign aircrew to valid, short-term tasks (escort officer, FEB/mishap board member, etc.), but must continually weigh the factors involved, such as level of aircrew tasking, flying proficiency, currency, and experience.

1.13.2. Supervisors will limit the non-flying duties for inexperienced aircrew to those related to combat activities. Aircrew members whose status is "duty not including flying" (DNIF) may log ground training events, including simulator, if the member's physical condition allows it. The flight surgeon who signs the AF 1042, **Medical Recommendation for Flying or Special Operational Duty**, placing the crewmember in DNIF status, should be consulted if the crewmember's ability to complete training is in question. Aircrew members that are on long term DNIF status, or have been suspended from flying operations, may perform non-mission related duties regardless of their experience level.

1.13.3. Students assigned to the 338 CTS will not be assigned additional duties until the completion of training.

1.13.4. Duties that may be assigned to API-1/2 crewmembers are weapons and tactics officer, programmer, flying safety officer, supervisor of flying (SOF), mobility/contingency plans, training (except AFORMS documentation), Squadron Standardization/Evaluation Liaison Officer (SELO), squadron life support officer, electronic combat officer, and other duties directly related to flying operations. In some instances, such as squadron-assigned flying safety officers, API-1/2s may be attached to the wing/group. API-1/2s will not be attached to wing/group staffs or occupy wing/group staff positions unless total wing crewmember API-1/2 manning is 100 percent or better. Commanders will ensure wing/group staff API-6 crewmembers perform duties justified in MAJCOM manpower standards documents and authorized in UMDs.

1.13.5. Aircrew will not perform long-term duties that detract from primary duties of training for, or performing, the unit flying mission.

1.14. Sortie Allocation Guidance:

1.14.1. Use the following guidance to determine sortie allocation priorities for scheduling.

1.14.1.1. CMR/API-1/2. Currency events required for deploying aircrew members to be fully mission capable to perform their duties on operational sorties. Inexperienced API-1/2 aircrew members should receive sortie allocation priority over experienced aircrew members.

1.14.1.2. FTU syllabus sorties.

1.14.1.3. CMR/API-1/2. Proficiency and continuation training events. Inexperienced API-1/2 aircrew members should receive sortie allocation priority over experienced aircrew members.

1.14.1.4. CMR API-6.

1.14.1.5. BMC.

1.14.2. API-8 (above wing level) personnel flying authorizations will be IAW AFI 11-401, *Flight Management*, and MAJCOM guidance. They will fly the BMC rate, however they are not required to complete BMC specific missions/events or meet monthly lookback requirements. Units should provide assigned API-6/8 flyers adequate resources to maintain minimum training requirements. However, API-6/8 flyer support will not come at the expense of the flying squadron's primary mission. API-6/8 flyers will accomplish non-RAP requirements with allotted BMC sorties. If attached units cannot meet attached flyer requirements, they must request relief IAW AFI 11-401, *Flight Management*. Units requiring flying hour adjustments for attached API-8 and applicable API-6 flyers must request program changes IAW ACCI 11-301, *Aircrew Life Support Program*.

1.14.3. Collateral or Cost of Business sortie requirements must be considered when developing unit flying hour programs. These sorties are not directly related to combat employment training but are necessary in day to day unit operations. These include, but are not limited to, ferry flights, incentive/orientation flights, deployments, and air shows. For the annual training cycle, the MAJCOM allocates a block of sorties to the unit for these purposes.

1.14.4. Unit flying hour programs are allocated a number of attrition sorties that compensate for non-effective training sorties. Non-effective sorties are logged when a training sortie, RAP or Non-RAP, is planned, but a major portion of valid training for that type mission is not accomplished due to poor weather, air aborts, equipment failure, etc. Crewmembers should not log a RAP sortie on operational missions if the sortie did not reflect a typical RAP profile. It is essential that non-effective sorties are logged appropriately to accurately allocate the number of attrition sorties.

1.15. Waiver Authority:

1.15.1. The 55 OG/CC is the waiver authority for all continuation, specialized training (chapters 4-7 and chapter 10), flying hour requirements for upgrade training, progression from inexperienced to experienced, and in-unit training timelines unless specifically noted otherwise. Send a courtesy copy of all OG/CC approved waivers to HQ ACC/XOFR.

1.15.1.1. The 55 OG/CC will forward all other waiver requests to HQ ACC/XOF. Provide an informational copy to the 12 AF/DO.

1.15.1.2. Waivers should be submitted and approved prior to the crewmember arriving for formal training. Copies of all waivers will be filed in the student's aircrew training folder and hand-carried to the school.

1.15.1.3. All waivers will be valid until the end of training cycle or as noted in the waiver.

1.15.1.4. Continuation ground training events listed in this instruction, but controlled by another AFI, will adhere to all restrictions in the governing AFI.

1.15.2. HQ ACC/XOF is the waiver authority for all other provisions in this AFI unless specifically noted.

1.15.3. The waiver authority for requirements and provisions in chapter 8 and 9 of this instruction is the HQ AIA/DO unless specifically noted otherwise in these chapters.

1.15.4. HQ ACC/XO is the waiver authority for the senior officer courses.

1.15.5. Syllabus waiver requests will be in electronic form and will include the rationale for the waiver to HQ ACC/XOF. A permanent record of all approved waivers will be maintained in the individual's training folder.

1.15.6. Provide the following information in all electronic waiver requests. Asterisked (*) items must be provided for all waivers. Fill in all other items as appropriate or mark NA next to those that are not utilized.

1.15.6.1. *Name, grade, SSN.

1.15.6.2. *Flying organization (assigned or attached).

1.15.6.3. *Present crew qualification including special qualifications.

1.15.6.4. *Total flying time in PAA.

1.15.6.5. *Specific nature of waiver.

1.15.6.6. *Reason and valid justification for waiver.

1.15.6.7. Crew qualification to which person is qualifying or upgrading.

1.15.6.8. Previous attendance at any formal instructor course (include course identifier and graduation date).

1.15.6.9. Training start date.

1.15.6.10. The prescribed mandatory upgrade or qualification date.

1.15.6.11. Date event last accomplished and normal eligibility period.

1.15.6.12. Remarks, to include formal school courseware required.

1.15.6.13. *Requesting unit point of contact (name, rank, telephone number, and functional address symbol).

Chapter 2

FORMAL TRAINING

2.1. General. This chapter outlines formal training of aircrew members into RC/OC/WC/TC-135 aircraft. Formal training including: initial mission qualification training (IMQT), requalification training (RQT), difference qualification training (DQT), faculty training course (FTC), and senior staff qualification training (SSQT) will be conducted by the 338 CTS. These formal training programs upgrade aircrew to BAQ, BMC or CMR in order to accomplish the unit's mission. Some wing, operations group or unit certification courses may be required to complete qualification training. Special qualifications and flight evaluations will be conducted in-unit following completion of the formal course. Evaluations for conversion training may be conducted by Det. 2, 645 MATS personnel with MAJCOM and unit approval.

2.1.1. The primary method of qualification training is to attend and complete the appropriate formal training course listed in the Education and Training Course Announcement (ETCA) formerly called AFCAT 36-2223 courses. Completing the appropriate formal course satisfies all qualification training requirements.

2.1.2. Formal training may be conducted in the respective squadrons IAW provisions of this chapter and with the approval of the 55 OG/CC. The in-unit formal training will be conducted using appropriate USAF training course syllabus tracks, flow programs, and requirements. Unit training flights will contact 338 CTS for an approved training program.

2.2. CMR/BMC Certification. The gaining squadron commander certifies aircrew members as CMR or BMC when training is complete.

2.2.1. Certification documents are filed in the crewmember's FEF. This will be accomplished immediately following successful completion of the crewmember's flight evaluation.

2.2.2. A tailored training program will be used to re-qualify aircrew who have regressed from BMC or CMR for any reason. This training will specifically address deficiencies which caused regression to re-qualify regressed aircrew.

2.3. Instructor Training and Supervision Requirements.

2.3.1. All instructors and evaluators must be graduates of a formal instructor course in order to conduct flight training and evaluation. Only those instructors who have completed the 338 CTS faculty training course (FTC), a formal SAC FTC, or a formal AETC –135/bomber FTC may conduct initial mission qualification training (except IMT/SMT).

2.3.2. Units are encouraged to use flight evaluators as instructors for qualification training and upgrade training programs. If an evaluator is used as a primary instructor the same evaluator should not administer the evaluation.

2.4. Prerequisites. Each aircrew member must comply with the appropriate formal course training prerequisites prescribed in the ETCA before entering qualification training. All personnel maintaining flying status will meet the following requirements before flying:

2.4.1. Physiological training.

2.4.2. Flight physical.

2.4.3. Egress training.

2.4.4. Life support equipment training.

2.4.5. Flight records review.

2.4.6. Local area survival training (Initial only).

2.5. Ground Training. Units will develop blocks of instruction including the following areas:

2.5.1. Unit tasking.

2.5.2. Unit tactics and employment.

2.5.3. Aircrew life support training.

2.5.4. Unit SIOP procedures (if applicable).

2.5.5. Flash blindness protection (if applicable).

2.5.6. Initial and continuation egress training will be accomplished using the aircraft, aircraft diagrams and pre-positioned aircrew life support equipment as training aids. See ACCI 11-301, *Aircrew Life Support Program* for more information.

2.5.7. Ground training accomplished during IMQT, DQT, or RQT establishes due dates for subsequent continuation training.

2.5.8. Each crewmember will demonstrate satisfactory knowledge of the unit's assigned mission during the SIOP certification (Q010) and/or the operational certification (Q011) to a formal board. Required board composition is 55 WG/CC or their designated representative, the SQ/CC or the operations officer (Chairman), 55 OSS/OSTW tactics officer, an assigned flight commander from the unit, and a squadron intelligence representative. Other board members will be determined by the 55 WG/CC or the 55 OG/CC. Q010 and Q011 may be completed following the flight evaluation. Suggested briefing guide is at Attachment 3.

2.6. Flying Training. The unit(s) must prepare a training program designed to maintain mission qualification and prevent regression of proficiency. Squadron-developed training programs should use profiles typical of squadron missions.

2.6.1. Approved in-unit training must be accomplished according to applicable formal training or approved school courseware if available.

2.6.2. Evaluations are flown IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*, and local standardization/evaluation criteria on sorties representing the unit's primary mission tasking.

2.6.3. All academic training required for qualification should be completed prior to flight evaluation and certification/qualification in the unit operational mission. All exceptions will be noted and justified in the student's training records prior to flight.

2.6.4. BMC or CMR individuals transferring between 55th Wing units will complete difference training as determined by the gaining unit's SQ/CC. This training should be based on experience, proficiency, currency, and previous formal training of the transferring individual. BMC or CMR individuals transferring between units must, as a minimum, complete the unit mission briefing

(UMB). Evaluations will be at the squadron commander's discretion. Use the multiple qualification section in chapter 1 to help determine when an evaluation is required.

2.6.5. The 55 OG/CC may approve initial, difference, requalification, upgrade, or special qualification training requirements on operational missions. An instructor of like specialty will supervise students on these sorties. Comply with restrictions in AFI 11-220, *Reconnaissance Flight Rules and Procedures* (a classified document), AFI 11-2RC-135 series instructions and specific theater OPORDs and directives. Squadron commanders will ensure the training will not impact mission effectiveness.

2.6.6. All qualification training will be completed prior to the flight evaluation. EXCEPTION: conventional operations and nuclear certification for CMR crewmembers may be completed following the flight evaluation to allow continuity of flight training and for maximizing training effectiveness. These events must be accomplished within 30 days of the in-flight evaluation to ensure the individual is capable of worldwide deployment.

2.6.7. Formal course syllabus, mission objectives and tasks are minimum requirements. Additional training events, based on student proficiency and background, may be incorporated into the program. Additional training due to student non-progression is available within the constraints of the formal course syllabus and may be added at the discretion of the 55 OG/CC or the 338 CTS/CC. Qualification training lessons should be completed in order; however, if mission scheduling or student progress dictates otherwise, the unit commander or designated training supervisor may change the order. Annotate changes in the student's training folder.

2.7. Initial Mission Qualification Training (IMQT). IMQT is used for qualifying newly assigned crewmembers in their first operational unit, re-qualifying crewmembers that have been unqualified for more than 5 years, or qualifying crewmembers coming from other major weapon systems for the first time.

2.7.1. All initial qualification training will be conducted in the 338 CTS.

2.7.2. Use IMQT formal training course.

2.7.3. Document all initial qualification training in the individual's training.

2.7.4. Each crewmember will complete Q003, mission qualification evaluation, following successful completion of the initial course.

2.8. Difference Qualification Training (DQT). DQT is used for two types of training. First, it is used to qualify crewmembers between different mission/series (M/S) –135 aircraft in the 55WG. Second, it can be used to train crewmembers in a different system/tactic within the same aircraft. The latter typically only requires a certification, however, the squadron commander may direct an evaluation for any type of difference training.

2.8.1. Training flight will determine which training events from the DQT tables are applicable after examining the training and evaluation records of each individual. The items marked in the tables are minimum requirements. If the individual has demonstrated proficiency in another system or aircraft for these events they do not need to re-accomplish the event unless it is required for currency. Crewmembers completing conversion training will assist unit training managers in developing a DQT program. The evaluation will include, as a minimum, all events formally trained during the difference course when an evaluation is required.

2.8.1.1. SQ/CC will determine whether Q004 or Q014 is required.

2.8.1.2. The unit commanders will send a copy of each DQT program to XOFR for review.

2.8.1.3. Document all difference training completion in the individual's training.

2.8.1.4. Major system changes (e.g. new engines or significant baseline upgrades) or qualification between different MDS (e.g. OC-135 to RC-135) aircraft requires Q004, difference qualification evaluation. HQ ACC/XOFR will assist the 338 CTS and unit training flights in developing training programs for major system changes.

2.8.1.5. Minor system changes within the same MDS requires Q014, Difference Certification. Unit standardization and evaluation will document the difference certification on the squadron letter of certification (letter of Xs).

2.8.2. Complete all applicable ground and flight instruction involving any equipment, systems or crew procedures that differ from the MDS aircraft in which they are currently qualified.

2.9. Requalification Training (RQT): Requalification training is used to qualify former RC/OC/WC/TC-135 crewmembers who are returning to fly 55 WG mission aircraft or to qualify crewmembers that are unqualified due to loss of currency. An individual is considered non-current in an area when they exceed the time requirements for events as dictated by the specific crew position. Continuation training requirements are found in chapter 4-11 of this instruction.

2.9.1. An aircrew member is unqualified upon either loss of currency exceeding 6 months or expiration of his/her qualification check, whichever occurs first. Note: Crewmember's must receive AA01 or Q003, as applicable, if loss of qualification is due to expiration of the qualification check. Requalification requirements are as follows:

2.9.1.1. Unqualified up to 180 days. Training as directed by the squadron commander and a proficiency demonstration of the non-current event/s to an instructor.

2.9.1.2. Unqualified 181 through 364 days. Training as directed by the squadron commander. Individuals need to requalify only in events required by their training level. A flight check by an evaluator is required once certified proficient in the non-current event/s by an instructor. Complete a flight evaluation covering the items directed in the training program.

2.9.1.3. Unqualified 1 to 2 years. Complete RQT training in-unit or at the FTU as directed by the squadron commander. Complete an in-flight evaluation following completion of all training.

2.9.1.4. Unqualified 2 to 5 years. Complete the appropriate ETCA requalification academic course at the FTU and an in-flight evaluation. The requalification academic course may be accomplished in-unit, with a waiver from HQ ACC/XOF.

2.9.1.5. Unqualified over 5 years. Complete the appropriate ETCA formal initial qualification course. Waiver authority is IAW AFI 11-202V1, *Aircrew Training*.

2.9.2. Basic and instructor requalification may be conducted simultaneously. Consult AFI 11-202V2, *Aircrew Standardization/Evaluation Program* and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria* for guidance on simultaneous instructor requalification and basic requalification evaluations.

2.9.3. See requalification tables in the aircrew specific chapters for ground and flight training events required for instructor requalification. Individuals who have completed a formal instructor course are not required to re-accomplish A010, instructor academic training.

2.10. Senior Staff Qualification Training (SSQT): SSQT is designed for senior rated officers as well as a small number of certain wing senior staff positions.

2.10.1. Course prerequisites are listed in the ETCA and the RC-135 SSQT syllabus.

2.10.2. Senior officers (colonel selectees and above) will complete SSQT in the appropriate -135 based upon the manner they will perform flight duties.

2.10.3. SSQT graduates will be BAQ qualified and eligible for upgrade to BMC/CMR status with HQ ACC/XO approval. These senior officers will maintain a BAQ level and will be responsible for currency events only.

2.10.3.1. Senior officers flying must complete initial qualification/requalification requirements and must maintain BMC continuation flying requirements in the -135, including simulators, to fly unsupervised in the assigned -135. Only general officers in commander billets and senior officers in NAF, wing, and operations group commander positions and who maintain BMC or higher are eligible to fly in their primary assigned aircraft without instructor supervision.

2.10.3.2. Evaluators must qualify/requalify as instructors prior to being designated flight examiners.

2.10.3.3. Senior staff course (A004) is an academics and simulator course for senior officers available at the 338 CTS through the ATS contractor. The academic course does not meet all the requirements for qualification in the RC/OC/WC/TC-135 due to the number of systems differences. All senior staff graduates of CCTS will take local systems academics for qualification in these aircraft.

2.10.4. All formal training courses for senior officers (colonel selects and above) conducted at the 338 CTS require approval at the following levels:

2.10.4.1. Colonel and colonel (selects): HQ ACC/XOF.

2.10.4.2. General selects and above: HQ ACC/XO.

2.10.5. Senior officers in training in the FTU are in formal training status. Unit duties will be turned over to appropriate deputies or vice commanders until training is completed. HQ ACC/XO must approve exceptions to this policy.

2.11. Conversion Training . Conversion is usually conducted off station with the engineering specialists responsible for converting to the new system training (e.g. new engines, baseline upgrades, minor system upgrades). These personnel will provide conversion training for the initial cadre whenever possible. In some instances, it will be necessary for units to form an initial cadre of personnel for whom certain training requirements may be waived. Det. 2, 645 MATS Greenville, TX will be considered the primary base for conversion training when new systems come online which represent significant changes from current aircraft configurations. Instructors completing conversion training will provide DQT to other unit aircrew members at home station. Coordinate cross-command training/evaluations through 55 OG/CC to HQ ACC/XOF and HQ AFMC/DOF.

2.11.1. The following conditions apply to management of initial cadre aircrew qualification: Form a nucleus of instructor and flight examiner personnel (initial cadre) to begin aircrew conversion. Initial cadre will not be designated in a crew position higher than currently held unless previously qualified in the conversion aircraft.

2.11.1.1. The 55 OG/CC will determine which training events are applicable after examining the training and evaluation records of initial cadre.

2.11.1.2. 55 OG/CC will review the proposed training qualification plan and forward a copy to HQ ACC/XOF prior to beginning conversion training for major system changes.

2.11.1.3. Crewmembers will complete all academic and ground training events before starting flight training on new systems.

2.11.2. Complete all training recommended on any equipment, systems or crew procedures which differ from that in the mission series (M/S)-135 aircraft initial crewmembers are currently qualified prior to evaluation/certification.

2.11.3. Crewmembers will complete Q002, closed book qualification examination, prior to unsupervised flight when emergency procedures are different.

2.11.4. Q004, difference qualification or Q0014, difference certification (as applicable) is the squadron commander's certification that all difference training is complete. Unit standardization and evaluation will document difference qualifications in the individual's FEF. The host unit providing conversion training will document all conversion training and maintain the training folder until successful completion of the training program.

2.12. The Central Flight Instructor Course (CFIC). CFIC prepares unit personnel for instructor qualification. CFIC attendance is a prerequisite for flight instructor status. Prerequisites and time limitations are listed in the ETCA and this instruction.

2.12.1. The FTU is responsible for ensuring the initial instructor training is completed. Exceeding the specified time period requires OG/CC directed additional training. Failure to complete an initial instructor evaluation for any reason requires appropriate action IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*.

2.12.2. The instructor course is designed to teach selected crewmembers fundamentals and concepts of instructing. Instructor candidates will be selected based on experience, judgment, flying skill, and technical knowledge.

2.12.3. Individuals who previously attended a formal MAJCOM flight instructor course and meet the minimum flying hour requirements may upgrade to an RC/OC/WC/TC-135 instructor in-unit with 55 OG/CC approval.

2.12.4. Training areas must include, but are not limited to the following:

2.12.4.1. Applicable regulations/flight manuals.

2.12.4.2. Emergency procedures.

2.12.4.3. Systems knowledge.

2.12.4.4. Flight training (minimum of two flights).

2.12.4.5. Instructor techniques.

2.12.4.6. Academic instruction.

2.12.4.7. Academic training course (A010) must be satisfactorily completed prior to any flight training being accomplished.

2.12.4.8. Q008, instructor evaluation.

2.12.5. The SQ/CC will personally interview the upgrading instructor and review instructor responsibilities, scope of duties, authority and philosophy prior to the instructor performing duties following satisfactory completion of upgrade requirements and instructor evaluation.

2.12.6. Units should forward the names of instructor candidates to the 338 CTS/CC and HQ ACC/XOFR to fill allocated training quotas no later than 30 days prior to class start date.

2.12.7. Instructor candidates must arrive at CFIC current and qualified in their unit assigned aircraft. Units may be required to provide additional training to CFIC candidates prior to school attendance.

2.12.8. The instructor candidate's squadron will ensure the pre-attendance workbook and flights are completed prior to the candidate entering formal training. The SQ/CC or their representative will sign the pre-attendance workbook certifying completion of the prerequisites. Failure to complete the pre-attendance workbook or flights without a HQ ACC/XOF waiver will result in the candidate being returned to the unit before training begins.

2.12.9. CFIC students will contact the 338 CTS for a list of all required publications for instructor upgrade training prior to attending the CFIC course.

2.12.10. The ATS contractor administers post-academic test to each candidate.

2.12.11. Multiple simulated emergencies may be required during CFIC flight training. The intent of these maneuvers is to broaden a candidate's experience base and will only be accomplished at CFIC. These maneuvers must be approved by HQ ACC/XOF.

2.12.12. CFIC candidates demonstrating unsatisfactory progress will be removed from training and returned to their unit.

2.13. Crediting Event Accomplishment. Flight training events accomplished during IMQT/RQT/DQT/SSQT is not creditable for continuation training requirements. Pre-CFIC and CFIC instructor upgrade flight training events are creditable.

2.14. CFIC Graduation. The FTU will submit a final training report to the unit at the completion of CFIC. The training report will summarize the students overall performance concluding with a recommendation to either upgrade, or not to upgrade, the student to instructor. The SQ/CC and training flight will determine whether to continue the candidates training or evaluation if upgrade is not recommended.

2.15. Faculty Training Course (FTC). A formal training program designed to qualify RC/OC/WC/TC-135 instructors for faculty duties in the FTU. Graduates are fully qualified FTU flight instructors. Prerequisites and time limitations are listed in the ETCA and the RC/OC/WC/TC-135 FTC syllabus.

2.16. Formal Training Reports . Feedback is an important tool for ATS/military academic instructors. Formal school ATS contractors and military academic instructors will devise and implement student feed-

back questionnaires. The post-graduate training critiques will be sent to each student's unit approximately 60 days after graduation. The student will complete one critique, with the student's commander or supervisor completing the other. The unit will return both critiques to the FTU or the unit where training was completed. Send critiques to Det. 10, ACC TRSS 105 Washington Street Suite F210, Offutt AFB, NE 68113-2113 for all RC/OC/WC/TC-135 training conducted at the 338 CTS. Det. 10, ACC TRSS will maintain the critique findings and actions taken for 24 months.

Chapter 3

CONTINUATION TRAINING GENERAL GUIDANCE

3.1. General. This chapter contains general guidance on continuation ground and flying training requirements for CMR, BMC, and BAQ aircrew.

3.2. Ground Training. Commanders will direct additional training, as necessary, to ensure all aircrew attain and maintain a state of proficiency which will permit immediate and successful completion of the unit's assigned mission.

3.2.1. An individual who instructs a class receives credit for that academic training requirement.

3.2.2. Ground training accomplished during any phase of qualification training may be credited toward continuation training requirements for the training cycle in which it was accomplished.

3.2.3. See aircrew specific tables for specific events and required frequency.

3.2.3.1. Crewmembers that lose CMR status because of overdue ground training will regain CMR status upon completion of training.

3.2.3.2. Course descriptions are listed in Attachment 2. Definitions of the frequency codes are also found in Attachment 2 under the word "frequency."

3.2.4. Units are encouraged to combine like courses whenever possible and teach only those portions applicable to their aircraft and mission. The time allotted for each course listed in the aircrew training syllabi should be used as a scheduling guide. The actual time required may vary based upon the needs and experience of the class.

3.3. Flying Training. All aircrew will accomplish the events shown in their respective continuation flight tables. Failure to accomplish these events may require additional training as determined by the SQ/CC.

3.3.1. Unit schedulers will tailor sorties to maximize training and use flying time effectively.

3.3.2. Flight training accomplished during qualification training is not creditable to continuation training requirements. See chapter 3, **Proration of end-of-cycle requirements,** for more information.

3.3.3. The continuation training program is based on a static 12-month period (1 October – 30 September).

3.4. FTU instructors. 338 CTS instructors maintain CMR. The FTU instructors must be certified to perform the unit mission in their primary aircraft.

3.5. Basic Aircraft Qualification (BAQ) Requirements.

3.5.1. Instrument/Qualification Evaluation IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*.

3.5.2. All BAQ flight and ground currencies (see aircrew specific chapters).

3.5.3. Aircrew remaining in BAQ status longer than 6 months will be grounded (except senior officers).

3.5.4. Authorized BAQ aircrew will perform all flight duties under instructor supervision.

3.5.5. CMR/BMC, RAP look-back does not apply to authorized BAQ staff aircrew members.

3.6. Basic Mission Capable (BMC) Requirements.

3.6.1. Q003, mission qualification evaluation IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program* and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*.

3.6.2. All BMC flight and ground event currencies (see aircrew specific chapters).

3.6.3. BMC aircrew members fly RAP sorties and/or events as required by this instruction and the RAP tasking message (if applicable). The SQ/CC may require BMC crewmembers increase flight requirements depending on actual flight duties these crewmembers are required to perform, their RC-135 experience, and proficiency.

3.6.4. Complete squadron developed flight/ground training programs for spin-up prior to participation in exercises, deployments or combat missions as required by the SQ/CC.

3.6.5. Sortie rate (look-back). See figure 3.1 (N/A API-8 above the wing level).

3.7. Combat Mission Ready (CMR) Requirements.

3.7.1. Q003, mission qualification evaluation IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria.*

3.7.2. All CMR flight and ground event currencies (see aircrew specific chapters).

3.7.3. Ground training requirements related to applicable RAP sorties/events.

3.7.4. Complete squadron developed flight/ground training programs for spin-up prior to participation in exercises, deployments or combat missions as required by the SQ/CC if required.

3.7.5. Sortie rate (look-back). See figure 3.1. (N/A API-8 above the wing level).

3.8. Special Categories:

3.8.1. MAJCOM and NAF API-8 aircrew members may be attached to 55 WG flying squadrons as directed by AFI 11-401, *Flight Management,* and MAJCOM guidance.

3.8.1.1. Mission directed training (MDT) for HHQ personnel (other than that conducted in support of a formal inspection) requires coordination with the supporting unit. MAJCOM directors (division chiefs for flight safety and IG) and NAF/DO are the reviewing authorities for assigned personnel. They will:

3.8.1.1.1. Coordinate with the supporting agency to ensure appropriate AFORMS data is maintained and provided IAW AFI 11-401, *Flight Management*.

3.8.1.1.2. Review API-8 crewmember accomplishments and currencies prior to authorizing crewmembers to participate in MDT.

3.8.1.1.3. Provide each API-8 crewmember with written documentation specifying the sortie types and events the crewmember is authorized to fly.

3.8.1.1.4. API-8 personnel maintaining BMC status are exempt from academic ground training, and special training programs within authorized mission areas. Specific currencies will be provided to the host squadron by HQ ACC/XOFR to participate in squadron scenarios for MDT.

3.8.1.2. Host units will:

3.8.1.2.1. Coordinate with the supporting agency to ensure appropriate training information is documented in AFORMS IAW AFI 11-401, *Flight Management*, and AFI 11-202V1, *Aircrew Training*, using the following forms.

3.8.1.2.2. AF Form 1520, **AFORMS Mission/Multi-Crewmember Scheduled Event Input**.

3.8.1.2.3. AF Form 1521, AFORMS Individual Scheduled Event Input.

3.8.1.2.4. AF Form 1522, **AFORMS Additional Training Accomplishment Report**.

3.8.1.3. Aircrew members will:

3.8.1.3.1. Review accomplishments and currencies for accuracy.

3.8.1.3.2. Submit qualification/authorization documentation to the supporting SQ/CC or operations officer prior to flying with that squadron.

3.8.1.3.3. Evaluate the demands of each mission scenario and ensure that their ability/proficiency will not be exceeded.

3.8.1.3.4. Instructor-qualified aircrew members may perform instructor duties with the concurrence of the 55 OG/CC if qualified and current for the applicable missions/events.

3.8.2. The flight surgeon will maintain flying rates and requirements IAW AFI 11-202V1, *Aircrew Training*, and chapter 10 of this instruction.

3.9. Situational Emergency Procedures Training (SEPT):

3.9.1. This training is not an evaluation, but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios. SEPTs should be accomplished in small groups so all members may participate to the fullest extent possible. One crewmember should present an abnormal/emergency situation and the group should discuss actions necessary to cope with the malfunction and carry the scenario to a logical conclusion. Critical action procedures and squadron special interest items should be emphasized.

3.9.2. This training will be accomplished during mission planning and/or at squadron safety meetings.

3.9.3. Only qualified crewmembers will lead the SEPT discussion.

3.9.4. Incorporate the following elements into squadron SEPT programs:

3.9.4.1. SQ/CC or DO involvement in the selection of a monthly SEPT topic.

3.9.4.2. Develop SEPT scenarios using C-135 mishaps/incidents as baseline cases.

3.9.4.3. Discuss at least one EP for each phase of flight during the SEPT session.

3.9.4.4. Accomplish two SEPTs each year that discuss minimum fuel and emergency divert training.

3.9.4.5. Incorporate the monthly SEPT topics into the OFT whenever possible.

3.10. Loss of currency. Crewmembers will not perform a sortie/event they are not current to perform unless with an instructor to regain currency in that particular event.

3.10.1. Regaining currency is required whenever a crewmember does not meet the currency requirements of this instruction. Overdue training requirements must be satisfied before the crewmember is considered qualified to perform the tasks. Training affecting BMC/CMR status will require regression to N-BMC/CMR until the appropriate training, specified by SQ/CC and this instruction, is completed. Training identified as not affecting BMC/CMR status does not require regression, although it may result in grounding until training is completed (e.g., life support training). The duration of grounding and status of sortie look-back will determine the effect on CMR status.

3.10.2. See chapter 2, **Requalification Training**, for specific requirements to regain currency.

3.10.3. Loss of Instructor Status. SQ/CCs will decertify instructors when one of the following conditions exists.

3.10.3.1. They fail a flight check. The instructor must successfully complete a flight evaluation IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program* and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria* to regain instructor status.

3.10.3.2. They fail a qualification, instrument, or mission written examination. Aircrew members must successfully re-accomplish the written exam to regain instructor status.

3.10.3.3. They become non-current in an event/sortie that causes removal from CMR/BMC status and the SQ/CC deems that loss of currency is of sufficient importance to require de-certification. If the SQ/CC does not elect this option, or if the instructor becomes non-current in events/sorties that does not require removal from CMR/BMC status, then instructor status may be retained. Individual will not instruct the event/sortie until the required currency is regained.

3.10.3.4. If in the judgement of the SQ/CC the candidate is not capable of performing instructor duties.

3.11. Ready Aircrew Program (RAP) Policy and Management: The RAP program is a training system designed to focus training on accomplishing a unit's wartime tasking for a specific unit. RAP qualification levels are broken down into BMC or CMR. These qualification levels are further divided into experienced or non-experienced categories. The aircrew specific chapters or the RAP tasking message establish the minimum number of RAP sorties and events per training cycle. The RAP tasking message takes precedence over this instruction, and may contain an updated sortie requirement or missions/events not yet incorporated in aircrew specific chapter. Non-RAP requirements are in addition to RAP requirements. Non-RAP requirements ensure basic aircrew skills, necessary to operate in the civil airspace environment safely, are maintained.

3.11.1. SQ/CCs will determine, assign and certify aircrew that will train for and maintain special capabilities or qualifications. Specialized training is normally accomplished in addition to CMR/BMC sortie/event requirements.

3.11.2. The SQ/CCs first training priority is to maintain CMR designated aircrew proficiency. The second training priority is continuity of qualification training.

3.11.3. Aircrew experience levels tell unit commanders how much flying and simulator training is required to meet RAP levels. The two aircrew experience levels are non-experienced and experienced.

3.11.4. "Non-experienced" identifies aircrew members who require additional training based on their experience to maintain CMR or BMC status.

3.11.5. "Experienced" identifies aircrew members who have demonstrated increased proficiency. Experienced aircrew members require less training to maintain CMR or BMC status.

3.11.6. 3.11.6.Aircrew members are classified as "non-experienced" when initially certified BMC/CMR by the squadron commander. Squadron commanders may reclassify aircrew members as "experienced" when they meet minimum progression criteria and demonstrate sufficient proficiency to handle the reduced continuation training requirements. Squadron DOT will document reclassification to "experienced" in the aircrew member's training folder. Squadron DOV will annotate experience levels in the "letter of Xs." See the aircrew specific chapters for the minimum experience level, progression requirements.

3.11.7. Progression from BMC to CMR requires:

3.11.7.1. A 1-month look-back at the higher sortie rate.

3.11.7.2. Qualification in all missions and specialized mission training required at CMR.

3.11.7.3. Confirmation that the aircrew member can complete the prorated number of sortie/event requirements remaining for CMR by the end of the training cycle.

3.11.7.4. Completion of mission-related ground training.

3.11.8. An effective RAP training sortie requires accomplishing a tactical mission profile or a building block type sortie. Each profile or sortie requires successfully completing a significant portion of the events applicable to that sortie type, as determined by the SQ/CC and aircrew specific chapter.

3.11.9. The total number of RAP sorties is the primary factor for maintaining an individual's qualification level. The breakout of sortie/mission types is provided as a guideline, minor variances are authorized. Variations may be used as a basis for regression by the SQ/CC. Qualification in a mission is determined by the SQ/CC considering the MAJCOM guidance and the individual's capabilities.

3.12. RAP Monthly and 3-Month Look-back and Regression. See figure 3.1 for more information.

3.12.1. Look-back computations begin the calendar day following completion of qualification training. The aircrew must maintain 1-month look-back until 3-month look-back is established.

3.12.2. CMR and BMC aircrew members will fly the required monthly sortie rate. Each crewmember's flying training is reviewed monthly to determine the proficiency achieved during the previous calendar month. Look-back does not apply to BAQ aircrew members or API 8 flyers above the wing. Monthly and 3-month look-back requirements for maintaining assigned CMR/BMC levels are listed in aircrew specific chapters of this instruction. End-of-cycle training requirements are based on the crewmember's experience level on the last day of the current training cycle.

3.12.3. Failure to meet 1-month look-back requires a review of the crewmember's 3-month sortie history. If the 3-month look-back is met the crewmember may remain BMC/CMR.

3.12.3.1. Failure to meet the 3-month look-back will result in either probation or regression. Probation lasts for the one month period following the date the crewmember failed the 3-month look-back requirement.

3.12.3.1.1. Regress to N-CMR/N-BMC status or

3.12.3.1.2. Remove the crewmember from a CMR manning position or

3.12.3.1.3. Initiate action to remove the crewmember from active flying status.

3.12.3.2. Crewmembers regressed to N-BMC/CMR for look-back for less than 180 days will complete a SQ/CC approved program to return the crewmember to BMC/CMR status. BMC/CMR aircrew must meet the subsequent 1-month look-back requirement prior to reclaiming BMC/CMR status upon completion of the SQ/CC directed program. The sorties and events accomplished during the program may be credited towards their total/type sortie and event requirements for the training cycle as well as for their monthly sortie requirements.

3.12.3.3. Crewmembers regressed to N-BMC/CMR beyond 181 days will accomplish a flight evaluation using a standard RAP profile or an appropriate certification of the event that caused the regression.

3.13. Failure of evaluations. Aircrew who fail any aircraft qualification, including periodic or instrument evaluations, will be handled IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*. Aircrew will regress and remain N-BMC/N-CMR until successfully completing required corrective action, a reevaluation, and are re-certified by the SQ/CC.

3.14. Failure to Meet End-of-Cycle Training Requirements. Aircrew who fail to complete both RAP and non-RAP event requirements by the end of the training cycle may be required to accomplish additional training depending on the type and magnitude of the deficiency. Refer to "proration," this chapter, for details. Report all training shortfalls IAW chapter 1**.**

3.14.1. Failure to meet non-RAP sortie and/or event requirements for BAQ results in supervised status until successful training is accomplished, as determined by the SQ/CC.

3.14.2. Failure to accomplish sorties required for special capabilities/qualifications will result in loss of that qualification. The SQ/CC will determine requalification requirements.

3.15. Proration of end-of-cycle requirements. The SQ/CC may prorate all training requirements when DNIFs, emergency leaves, non-flying TDY, exercises, and contingency/operational deployments preclude training for a portion of the training period at the end of the training cycle. Normal annual leave will not be considered as non-availability. Extended bad weather, which precludes the unit from flying for more than 15 consecutive days, may be considered as non-availability. The following guidelines apply:

3.15.1. Proration will only be used to adjust for genuine circumstances of training non-availability, not to mask training or planning deficiencies.

3.15.2. Proration is based on cumulative days of non-availability for flying during the training cycle. Use table 3.1 to determine the number of months to be prorated based on cumulative calendar days of non-availability. For example, Capt Jones was granted 17 days of emergency leave in January and attended SOS in residence from March through April for 56 consecutive calendar days. His SQ/CC

authorized a total of 3 months proration from his training cycle (1 month for emergency leave and 2 months for SOS).

3.15.3. A crewmember's training cycle will start over at a prorated share following completion of training if initial mission qualification training is re-accomplished.

3.15.4. Prorated numbers resulting in fractions of less than 0.5 will be rounded to the next lower whole number, but no requirement may be prorated below one.

3.15.5. Newly assigned crewmembers achieving BMC/CMR after the 15th of the month begin tracking continuation training for proration/look-back on the first day of the following month.

3.15.6. An aircrew member's last month on station prior to departing on a PCS may be prorated. Departing crewmembers may be considered CMR for reporting purposes during up to 60 days from date of their last flight, or until loss of CMR currency, port call date, or sign-in at a new duty station, whichever occurs first.

3.15.7. CMR aircrew members who attend USAFWS in TDY-and-return status may be reported throughout the TDY as CMR. These aircrew members will accomplish a prorated share of sortie/ event requirements IAW table 3.5 upon returning to home station.

3.15.8. Operational missions (including contingency missions) can have a positive or negative impact on a unit's continuation training program. A potential lack of training opportunities, while deployed, can place a burden on the unit forcing it to accomplish the majority of its continuation training program in a reduced period of time at home station. The following proration procedures are intended to provide flexibility in accomplishing the unit's continuation training program.

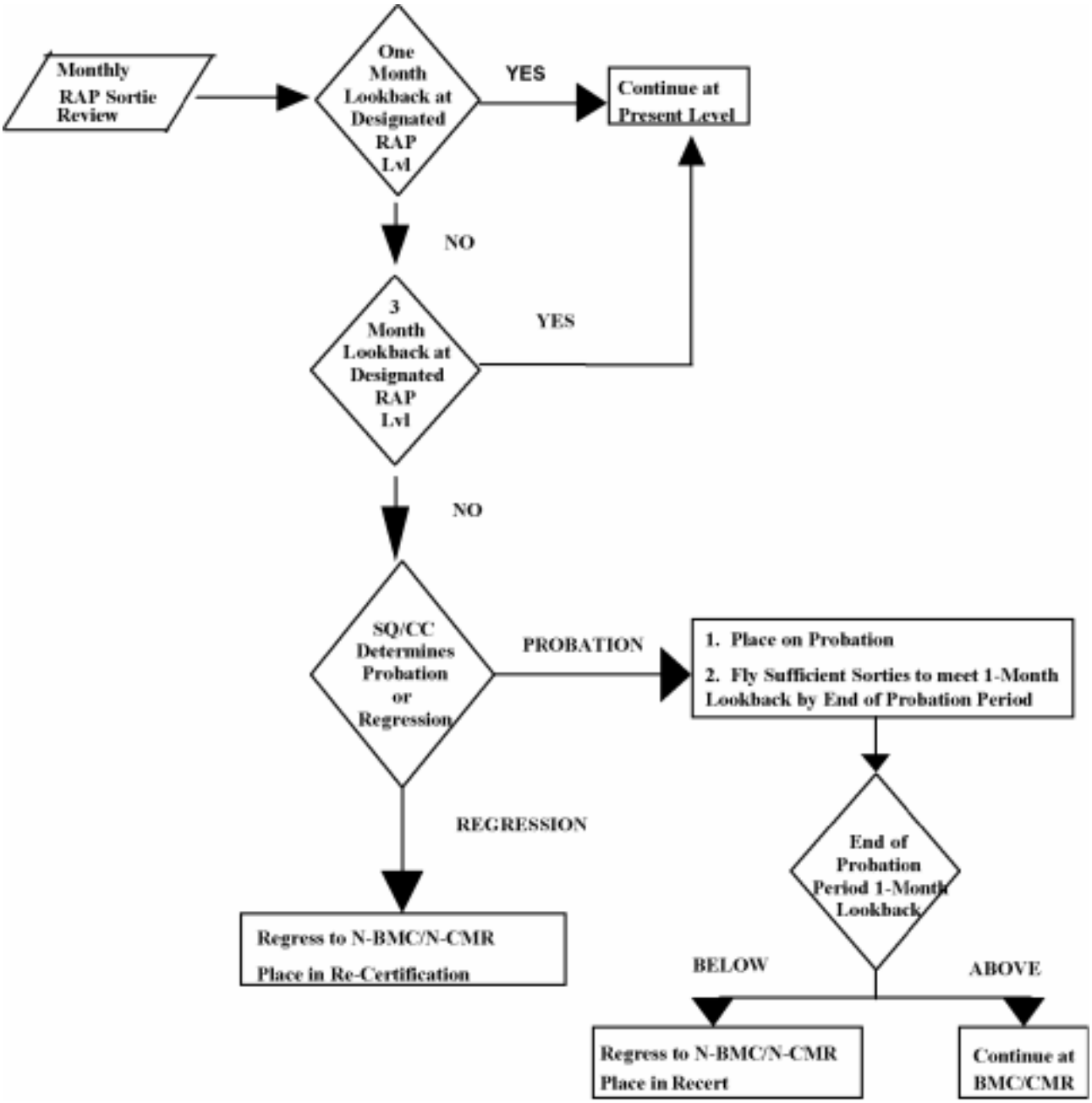
3.15.8.1. The 55 OG/CC may authorize operational/contingency sorties that provide valid RAP training to be logged as RAP sorties/events while deployed. The 55 OG/CC will provide units with guidance pertaining to the percentage and type of operational sorties that may be logged based on the definition of a RAP sortie in this instruction. Events accomplished on these sorties count toward RAP event requirements, and these sorties/events may not be prorated upon return to home station.

3.15.8.2. Units will prorate RAP sorties and events for deployment preparation, the actual period of time each individual was deployed, and recovery time if crewmembers are not authorized to log RAP sorties/events while deployed.

Table 3.1. Proration Allowance.

CONSECUTIVE DAYS OF NONFLYING	MONTHS OF PRORATION ALLOWED
0 – 15	0
16 – 45	1
46 – 75	2
76 – 105	3
106 – 135	4
136 – 165	5
166 – 195	6
196 – 225	7
226 – 255	8
256 – 285	9
286 – 315	10
316 –345	11
over 345	12

Figure 3.1. Regression Flow Chart.



Chapter 4

PILOT TRAINING

4.1. General. This chapter specifies minimum training requirements for initial mission qualification, pilot upgrade training, requalification, difference qualification, instructor qualification, senior officer, and continuation training for 55th Wing assigned pilots.

4.2. Prerequisites.

4.2.1. Pilot prerequisites are minimum requirements for qualification. Pilots progress individually and minimum requirements may not provide for the experience and skills required to progress pilots. Squadron commanders and training flight will ensure that all pilots selected for aircraft commander or instructor upgrade programs have the necessary skills and experience to comply with the appropriate formal course training prerequisites listed in the ETCA and the minimum requirements listed below:

4.2.2. Co-Pilot: Rated pilot on flying status with survival training completed to include SV-80, SV-90, and SV-83.

4.2.3. Aircraft Commander: Current –135 co-pilot or first pilot with 1500 total military flying hours (including student and other time, does not include simulator time), or 1200 total military flying hours with 300 hours jet time, or former or current –135 copilot with 500 hours in –135 aircraft and 1000 total military flying hours or First Assignment IP with 1000 hrs total military flying hours and 1 year as an IP IAW MAJCOM directives.

4.2.4. Pilot Upgrade (PUP): Must be a rated pilot on flying status with 1500 hrs total military flying hours (including student and other time, does not include simulator time), or 1200 hrs total military flying hours with 300 hrs jet or -135 copilot with 1000 hrs total military flying hours and 500 hrs in –135.

4.2.5. Instructor Pilot: Must be qualified and current in any -135 as aircraft commander, be nominated as instructor candidate by unit commander with a minimum of 1500 hours total flying (including student and other time, does not include simulator time) time and 300 hours in -135 (See table 4.3. for pre-CFIC requirements).

4.2.6. Requalification (RQT): Previously qualified in the -135 for the position seeking requalification and currently on flying status.

4.3. RAP Sorties . Pilots may log a RAP sortie on all operational missions and Busy Relays when authorized by the OG/CC. RAP sorties are designed to promote mission effectiveness and coordination among the mission area compartment personnel. These sorties are usually flown on mission aircraft with a mission crew. SQ/CCs may approve RAP sorties on front-end only trainers if the sortie simulates a full mission profile. Unit training managers will develop profiles to simulate operational mission for these sorties.

4.4. Initial Mission Qualification Training.

4.4.1. The primary method of initial qualification is to attend and complete the appropriate formal training course listed in the ETCA. Completing the appropriate formal course satisfies all qualification training requirements.

4.4.2. Copilot (CP), aircraft commander (AC), pilot upgrade (PUP), instructor pilot (IP), and pilot requalification (RQT) qualification training events are listed in table 4.1. Senior staff qualification events are listed in table 4.8 at the end of this section. Items marked P indicate the events must be graded to the proficient level. Numbered events indicate the minimum requirements. Students showing proficiency in events are not authorized to perform less than the minimum required without 55WG/OG waiver.

4.4.3. The difference qualification events listed in table 4.1 are the designed to aid in the unit's development of tailored training programs. Tailored programs should be based on the experience level of students and differences between platforms transferring from or receiving multiple qualification in (see chapter 2 for addition information on DQT). A minimum of two sorties are required for difference training. In addition, the items marked (P) proficient will be demonstrated to that level as a minimum.

4.4.4. Use the following definitions for all training event tables throughout this chapter: **1** – the event must be accomplished at least one time during training; **AR** – As Required; **P** – train to a P (Proficient) level; **XP** – accomplish a minimum of X times to a proficient level. Student must reach the proficient level on at least one sortie to achieve the requirement. **F** – train to a familiar level.

Table 4.1. Pilot Qualification Training Requirements.

CODE	TRAINING EVENT	CP	AC	PUP	DQT	RQT	NOTE
A001	Initial qualification academic course	1	1		1	1	1
A002	PUP academic course			1			
A010	Instructor academics					1	5
A017	Regulation and directive knowledge	1	1	1		1	
A027	Initial recon/ops study (RC-135)	1	1		AR	1	
A029	Difference course				P		
A034	Requalification academics					1	
A037	EWO performance training	1	1	1	AR	1	1
A052	Receiver air refueling indoctrination	1	1	1	AR	1	6
G001	Flying safety training	1	1	1		1	
G002	Supervisor safety training	1	1	1		1	1
G003	Flight line security and drivers examination	1	1	1		1	1
G005	Aircraft Marshaling Training and Examination	1	1	1	AR	1	
G006	US/Russia Prevention of Dangerous Military Activities	1	1	1	AR	1	
G010	Chemical-biological warfare defense training (CBWD)	1	1		AR	1	1
G011	Cockpit procedural trainer (CPT)	3	3	3	AR	3	
G025	Aircraft field trip	3	3	3	AR	3	
G031	Initial SIOP C2 procedures training	1	1		AR	1	1
G033	Alert procedures	1	1	1	AR	1	1
G035	PLZT goggles exercise	1	1	1	AR	1	1
G036	Flash blindness/thermal protection training	1	1	1	AR	1	1
G040	SIOP study	1	1	1	AR	1	1
G060	Tactics	1	1	1	AR	1	10
G070	Aircrew intelligence	1	1	1	AR	1	
G080	Communications procedures	1	1		AR	1	
G090	Anti-hijack	1	1			1	
G100	Laws of armed conflict	1	1			1	
G110	Protection from terrorism	1	1			1	
G119	ISOPREP (initial)	1	1			1	1
G130	Instrument refresher course	1	1	1		1	
G182	Hazardous cargo		1	1		1	1

CODE	TRAINING EVENT	CP	AC	PUP	DQT	RQT	NOTE
G190	Aircraft servicing	1	1	1	AR	1	
G210	Alert start procedures/cartridge start procedures	P	P	P	AR	P	
G231	Initial CRM	1	1	1		1	
G252	Electrics and fuels simulator	P	P	P		P	
G253	Engines and pneumatics simulator	P	P	P		P	
G254	Flight controls and hydraulics simulator	P	P	P		P	
G258	ATD difference training profiles				1		1
G260	Instrument simulator sortie	P	P	P		P	
G261	Normal procedures simulator	2	2	2		2	
G262	Aerodynamics simulator	P	P	P		P	
G263	Copilot 3 engine simulator	1					
G264	IP requalification simulator					P	1
G270	Tactics simulator	P	P	P		P	
G280	Small arms training	1	1			1	
G300	Unit specific training event	1	1	1	1	1	1
G330	Unit mission brief	1	1	1		1	
G632	Security clearance	1	1			1	
G633	Special survival refresher course		AR	AR		1	1
GA02	Survival, evasion, resistance, and escape (SERE)	1					
LS01	Local area survival (initial)	1	1			1	7
LS02	High threat combat survival training	AR	AR	AR	AR	AR	8
LS03	Water survival training (WST)		1			1	1
LS04	Aircrew chemical defense equipment training (ACDE)	1	1			1	
LS06	Aircrew life support equipment training (ALSE)	1	1			1	7
LS08	Egress (non ejection)	1	1	1	1	1	10
LS011	Low threat combat survival training (LTCST)	AR	AR	AR	AR	AR	8
M001	Sortie	7P	7P	7P	2P	5P	
M021	RAP sortie	3P	3P	3P	AR	3P	
N131	En route rendezvous (receiver)	P	P	P	AR	P	
N132	Point parallel rendezvous (receiver)	P	P	P		P	
P007	Approach to initial buffet and recovery (OFT only)	P	P	P	AR	P	10
P010	Takeoff-initial	3P	3P	3P	P	P	
P011	Takeoff, night	P	P	P		P	
P012	Takeoff gyro mode	P	P	P		P	
P015	Instrument departure	2P	2P	2P		P	
P018	Copilot takeoff duties	2P	2P	2P	P	P	2
P026	Takeoff, climb procedures	P	P	P	P	P	
P030	Max mode T/O, 30 flap	P	P	P		P	
P035	Power management control (PMC) off, takeoff	P	P	P	P	P	1
P040	Simulated engine failure, takeoff continued	1	5P	5P	P	3P	3,11
P048	Three engine reverse thrust land	1	2P	2P	P	P	1,2,4,6
P050	Holding	2P	2P	2P		P	2
P051	FIX-to-FIX procedures	P	P	P		P	2
P060	Penetration (published)	P	P	P		P	2
P061	En route descent	P	P	P		P	
P062	High penetration approach	1	P	P			
P080	Instrument approach (auto/coupled)	P	P	P		P	
P101	ILS approach	4P	4P	4P		4P	
P102	ILS approach (gyro mode)	2P	2P	2P		2P	
P103	PAR approach	3P	3P	3P		2P	
P110	Non-precision approach	P	P	P	P	P	
P112	TACAN/VORTAC/LOCALIZER approach	4P	4P	4P		4P	
P113	ASR approach	2P	2P	2P		2P	

CODE	TRAINING EVENT	CP	AC	PUP	DQT	RQT	NOTE
P130	Circling approach	2P	2P	2P		2P	
P135	NDB approach	2P	2P	2P		2P	2
P140	Visual traffic pattern	5P	5P	5P		5P	
P160	Missed approach	4P	5P	5P		4P	
P170	Approach and go-around, simulated engine out	1	5P	5P	P	3P	11
P171	Approach and go-around, simulated engine out, rudder power off	1	2P	2P	P	2P	11
P180	Approach and landing (simulated engine out)	1	8P	8P	P	5P	4,12
P190	Landing	30P	20P	20P	P	15P	12
P191	Landing, full stop (reverse thrust, if applicable)	2P	2P	2P	P	2P	1,6
P192	Landing, night	5P	5P	5P		3P	
P194	Landing, 30 degree flaps	1	3P	3P	P	2P	12
P195	Landing, simulated engine out, 4 engine takeoff				1	P	5
P197	Landing, full stop	3P	4P	4P	P	2P	
P198	Opposite seat sortie		P	P		P	
P199	Opposite seat landing (touch and go or full-stop)		4P	4P		2P	
P200	Touch and go landing	10P	10P	10P	P	5P	
P205	Landing attitude demonstration				P	P	5
P210	Touch and go landing IP duties		3P	3P		2P	
P240	Landing gear alternate/emergency extension	2P	2P	2P		P	
P250	Main flap emergency operation	2P	2P	2P		P	
P260	Have Quick radio procedures	P	P	P		P	
P270	Secure radio operation	P	P	P		P	
P280	Aircrew chemical defense task qualification training (ACDTQT)	P	P	P		P	2
P290	APU or JAFSU operations	P	P	P	P	P	1
P360	Mission planning/briefing/critique	6P	6P	6P	P	4P	
P361	Preflight	6P	6P	6P	P	4P	10
P364	Auto-pilot off, cruise	P	P	P		P	
P366	Checklist procedures	7P	7P	7P	P	5P	
P367	Crew coordination	7P	7P	7P	P	5P	
P369	Aircraft/mission equipment operation	7P	7P	7P		5P	
P380	Spoiler demonstration	F	1	1		1	3
P382	Trim demonstration	F	1	1		1	3
P383	Simulated jammed stabilizer	1	P	P		P	4
PP01	Flight physical	1	1	1	1	1	1,7
PP11	Physiological training	1	1	1	1	1	1,7
Q001	Open book qualification exam	1	1	1	AR	1	
Q002	Closed book qualification exam	1	1	1	1	1	
Q003	Mission qualification evaluation	P	P	P		P	
Q004	Difference qualification evaluation				AR		
Q005	ATD evaluation (qualification/upgrade)	1	1	1		1	
Q008	Instructor evaluation					AR	5
Q010	SIOP certification	1	1	1		1	1
Q011	Operational certification (includes initial)	1	1			1	
Q014	Difference certification				1		9
Q017	Treaty orientation course	1	1	1	1	1	1
Q060	EMCON 3/4 certification		P	P	P	P	6
Q095	Flight publications check	1	1	1		1	
R006	Receiver A/R, autopilot off, night		2P	2P		P	
R010	Receiver A/R				P		1
R011	Receiver A/R, indoctrination	1					

CODE	TRAINING EVENT	CP	AC	PUP	DQT	RQT	NOTE
R012	Receiver A/R (day)	1	4P	4P		2P	
R013	Receiver air refueling overrun	P	P	P		P	
R020	Receiver A/R (night)	F	2P	2P		2P	
R030	Receiver A/R (heavyweight)	F	P	P		P	
R040	Receiver breakaway/practice emergency separation	2P	2P	2P	P	2P	
R041	Tanker A/R				P		1
R045	Tanker breakaway/practice emergency separation				P		1
R046	Tanker autopilot off				P		1
R047	Tanker A/R (heavy weight)				P		1
R050	Rec. A/R, tanker autopilot off	F	P	P		P	
R165	Radio silent refueling	P	P	P		P	
R220	Manual boom latch (MBL)	P	P	P		P	
R221	A/R limits demonstration	F	1	1	P	1	3
R223	Pilot director lights out (PDL) A/R	F	P	P		P	
RR01	Flight records review	1	1	1		1	
SS01	Combat survival course (S-V-80-A)	1					
SV83	Special survival training (S-V-83-A)	1	1		1	AR	1
WW01	Water survival course (S-V-90-A)	1					

Notes:

1. As required. RQT students returning to fly after tours away from reconnaissance operations of 2 years or less are not required to complete the course.

2. May be accomplished in the OFT.

3. IP requalification must be graded to (P) proficient level.

4. Co-pilots may accomplish in OFT only.

5. Required for instructor pilot candidates only.

6. May be accomplished on the ground or in OFT.

7. Grounded until complete.

8. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

9. DQT may require either certification or qualification check.

10. As required for DQT.

11. For DQT IP's and AC's events must be proficient (P). For DQT copilots events must only be accomplished once (1).

12. Event required for DQT IPs and ACs only.

4.5. PUP Training.

4.5.1. The Pilot Upgrade Program (PUP) is a formal training course for -135 copilots upgrading to aircraft commander. Formal school attendance in the 338 CTS is the primary method for AC qualification training. In-unit upgrade using courseware provided by the formal school is the secondary method. In-unit AC upgrade flight training will be accomplished only when formal school upgrade quotas are not available and HQ ACC/XOF waiver has been granted.

4.5.2. PUP training is divided into Category I and Category II training cycles.

4.5.2.1. Category I training is a maximum 45-day orientation period covering aircraft commander responsibilities accomplished at the candidate's home unit prior to Category II training (either formal school or in-unit). The individual may continue to perform copilot duties and log continuation training events while acting as a copilot during category I training. Proficiency is not required for category I training. All ground training currency events, e.g., altitude chamber, annual physical, etc will cover the period up to Category II training completion. A minimum of two left-seat familiarization sorties consisting of the training events listed in table 4.2 are required for category I training. One sortie will include a RAP sortie. The other sortie need not be a full mission profile, but will include at least one hour dedicated to left-seat pattern training for the PUP candidate.

4.5.2.2. Category II consists of the formal flight and academic training listed in table 4.1.

4.5.2.3. Document all PUP qualification training in the individual's training folder.

4.5.2.4. Each crewmember will complete Q003, mission qualification evaluation, following successful completion of the initial course.

Table 4.2. PUP Category I Training Events.

CODE	TRAINING EVENT	NUMBER
P010	Takeoff-initial	2
P040	Simulated engine failure, takeoff continued	3
P170	Approach and go-around (simulated engine out)	3
P171	Approach and go-around simulated engine out, rudder power off	1
P180	Approach and landing, simulated engine out	3
P190	Landing	6
P191	Landing, full stop (reverse thrust, if applicable)	1
P194	Landing, 30 degree flaps	3
P200	Touch and go landing	6
P360	Mission planning/briefing/critique	2
P366	Checklist procedures	2
P367	Crew coordination	2
P369	Aircraft/mission equipment operation	2
R010	Receiver A/R	1

4.6. CFIC Pilot Aircrew Instructor Program.

4.6.1. Pre-CFIC requires a minimum of three right seat flights. Table 4.3 lists the events required to prepare IP candidates for CFIC profiles. The individual may continue to log continuation training events during pre-CFIC training.

Table 4.3. Pilot Pre-CFIC Training.

CODE	EVENT	NUMBER
M021	RAP sortie	1
P040	Simulated engine failure, takeoff continued	2
P171	Approach and go-around (simulated engine out)	2
P180	Approach and landing (simulated engine out)	2
P190	Landing	2
P194	Landing, 30 degree flaps	2
P205	Landing attitude demonstration	2
P240	Landing gear alternate procedures/emergency extension (note 1)	1
P250	Main flap emergency operation (note 1)	1
P360	Mission planning/briefing/critique	1
P361	Preflight (right seat)	1
P380	Spoiler demonstration	1
P382	Trim demonstration	1
P383	Simulated jammed stabilizer	2
R010	Receiver A/R	2

4.6.2. CFIC requirements are listed in table 4.4 in the IP column. The individual may continue to log continuation training events during pre-CFIC training.

Table 4.4. Instructor Pilot Qualification CFIC.

CODE	TRAINING EVENT	IP	NOTES
A001	Initial qualification academic course	1	
A010	Instructor academics	1	
A017	Regulation and directive knowledge	1	
A027	Initial recon/ops study (RC-135)	1	
A052	Receiver air refueling indoctrination	1	3
G001	Flying safety training	AR	
G002	Supervisor safety training	AR	1
G003	Flight line security and drivers examination	AR	1
G006	US/Russia Prevention of Dangerous Military Activities	AR	
G010	Chemical-biological warfare defense training (CBWD)	AR	1
G190	Aircraft servicing	AR	
G210	Alert start procedures/cartridge start procedures	P	
G232	Flight Instructor CRM Training	1	
G632	Security clearance	AR	4
G633	Special survival refresher course	AR	
M001	Sortie	5P	
M021	RAP sortie	P	
N131	En route rendezvous (receiver)	P	
N132	Point parallel rendezvous (receiver)	P	
P007	Approach to initial buffet and recovery (OFT only)	P	
P010	Takeoff-initial	P	
P011	Takeoff, night	P	
P012	Takeoff gyro mode	P	
P015	Instrument departure	P	
P018	Copilot takeoff duties	P	2
P030	Max mode T/O, 30 flap	P	
P040	Simulated engine failure, takeoff continued	5P	
P048	3 engine reverse thrust landing (if applicable)	2P	2,3
P050	Holding	P	2
P051	FIX-to-FIX procedures	P	2
P060	Penetration (published)	P	2
P061	En route descent	P	
P080	Instrument approach (auto/coupled)	P	
P101	ILS approach	2P	
P102	ILS approach (gyro mode)	P	
P103	PAR approach	2P	
P112	TACAN/VORTAC/LOCALIZER approach	2P	
P113	ASR approach	P	
P130	Circling approach	2P	
P135	NDB approach	2P	2
P140	Visual traffic pattern	5P	
P160	Missed approach	4P	
P170	Approach and go-around (simulated engine out)	4P	
P171	Approach and go-around, simulated engine out, rudder power off	3P	
P180	Approach and landing (simulated engine out)	8P	
P190	Landing	15P	
P191	Landing, full stop (reverse thrust, if applicable)	2P	3
P192	Landing, night	5P	
P194	Landing, 30 degree flaps	3P	
P195	Landing, simulated engine out, 4 engine takeoff	5P	
P197	Landing, full stop	P	
P200	Touch and go landing	10P	

CODE	TRAINING EVENT	IP	NOTES
P205	Landing attitude demonstration	P	
P210	Touch and go landing IP duties	2P	
P240	Landing gear alternate procedures/emergency extension	2P	
P250	Main flap emergency operation	2P	
P260	Have Quick radio procedures	P	
P270	Secure radio operation	P	
P280	Aircrew chemical defense task qualification training (ACDTQT)	AR	1,2
P360	Mission planning/briefing/critique	4P	
P361	Preflight	4P	
P364	Autopilot off, cruise	P	
P366	Checklist procedures	5P	
P367	Crew coordination	5P	
P369	Aircraft/mission equipment operation	5P	
P380	Spoiler demonstration	2P	
P382	Trim demonstration	2P	
P383	Simulated jammed stabilizer	2P	
Q005	ATD evaluation	1	
Q008	Instructor evaluation	1	
R006	Receiver A/R, autopilot off, night	2P	
R012	Receiver A/R (day)	P	
R013	Receiver air refueling overrun	P	
R020	Receiver A/R (night)	P	
R030	Receiver A/R (heavyweight)	P	
R040	Receiver breakaway/practice emergency separation	P	
R050	Receiver A/R, tanker autopilot off	P	
R165	Radio silent refueling	P	
R220	Manual boom latch	P	
R221	A/R limits demonstration	3P	
R223	Pilot director lights out (PDL) A/R	P	
RR01	Flight records review	1	
SV83	Special survival training (S-V-83-A)	1	1

Notes:

1. As required by course syllabus and/or gaining unit mission.
2. May be accomplished in the OFT.
3. May be accomplished on the ground or in OFT
4. Waiver authority is HQ ACC/XOF.

4.7. Continuation ground training. Table 4.5 contains a list of all ground training events. Use the legend below to determine the purpose of each column. Pilots will complete all ground training requirements in accordance with table 4.5. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

4.7.1. CMR (first column). The CMR assigned crewmembers must complete items marked with an X or CMR status will be lost.

4.7.2. GND . The aircrew member must complete items marked with an X or they will be grounded until accomplished.

4.7.3. CODE . A complete description of the event code is found in Attachment 2.

4.7.4. TRAINING EVENT . Name associated with code in Column 3.

4.7.5. CMR . All CMR pilots must complete these items to remain current. Failure to accomplish could cause loss of qualification.

4.7.6. BMC . All BMC and API-6 pilots must complete these items to remain current. Failure to accomplish could cause loss of qualification. Unit SQ/CCs may require additional currency training depending on unit mission and unit requirements.

4.7.7. API 8 . All API 8 pilots must complete these items to remain current. Failure to accomplish could cause loss of qualification.

4.7.8. BAQ . All BAQ aircrew members must complete these items to remain current. Failure to accomplish could cause loss of qualification

4.7.9. NOTE . See notes at the end of table for additional information.

Table 4.5. Continuation Ground Training Requirements.

CMR	GND	CODE	TRAINING EVENT	CMR	BMC	API 8	BAQ	NOTES
X		A027	Ops study	Q	A			5
		AA01	Qualification check				C	
		AA02	Qualification check, simulator	C	C	C	C	
		AA11	Instrument check	C	C	C	C	
		AA12	Instrument check, simulator	C	C	C	C	
		AA21	Combined qualification and instrument check	C	C	C	C	
		AA22	Combined qualification and instrument check, simulator	C	C	C	C	
		G001	Flying safety training	Q	Q	Q	Q	
		G006	US/Russia Prevention of Dangerous Military Activities	A	A			
		G010	CBWD	A	A			5
X		G030	SIOP C2 procedures	SA	SA			1,5
X		G040	SIOP study	SA	SA			1,5
		G060	Tactics	A	A			5
X		G070	Aircrew intelligence	A	A			5
X		G080	Communications procedures	A	A	A		5
		G090	Anti-hijack	B	B	B	B	
		G100	Laws of armed conflict	A	A	A	A	5
		G110	Protection from terrorism	A	A	A	A	
X		G120	ISOPREP review	SA				5
		G130	Instrument refresher course	C	C	C	C	
		G182	Hazardous cargo	A				4
		G190	Aircraft servicing	A	A			5
		G210	Alert start/cartridge procedures	A				1,5
		G222	Hydraulic system ground course (SYS 1)	A				3
		G223	Flight control ground course (SYS 2)	A				3
		G224	Fuel system ground course (SYS 3)	A				3
		G225	Electrical system ground course (SYS 4)	A				3
		G226	Environmental system ground course (SYS 5)	A				3

CMR	GND	CODE	TRAINING EVENT	CMR	BMC	API 8	BAQ	NOTES
		G227	Engines, propulsion, and APU ground course (SYS 6)	A				3,4
X	X	G230	CRM	B	B	B	B	6
		G250	Refresher simulator	A				5
		G252	Electrics and fuels simulator	A				2,5
		G253	Engines and pneumatics sim	A				2, 5
		G254	Flight controls and hydraulics simulator	A				2,5
		G260	Instrument simulator	A				2
X		G280	Small arms training	B	B			5
X		G330	Unit mission briefing	AR	AR	AR		5
X		G633	Special survival training refresher course	C*	C*			4,5
X		LS02	High threat combat survival training (HTCST)	B	B	B	B	7
		LS03	Water survival training (WST)	B	B	B	B	
X		LS04	ACDE training	A	A			5
		LS06	Aircrew life support equipment (ALSE)	A	A	A	A	
X	X	LS08	Egress (non ejection)	A	A	A	A	
X		LS011	Low threat combat survival training (LTCST)	B	B	B	B	7
X	X	PP01	Flight physical	A	A	A	A	
X	X	PP11	Physiological refresher	AR	AR	AR	AR	
X		Q003	Mission qualification evaluation	C	C	C		
X		Q010	SIOP certification	C*	C*			1,5
X		Q011	Operational certification	SA	AR			
X		Q015	Special mission qualification	AR	AR			
		RR01	Flight records review	A	A	A	A	

Notes:

1. Required for units with SIOP DOCs.

2. Dual log with G250.

3. Required in lieu of G250, G252,G253, G254 for units whose pilots are unable to attend refresher simulators

4. If applicable.

5. Not applicable to MAJCOM/NAF DOV/OL-C AMCS/DT

6. Waiver authority is the 55 WG/CC.

7. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

4.8. Flying Continuation Training Requirements. This section describes the pilot flying continuation training requirements. Table 4.6 contains a list of all continuation flight training for both RAP/non-RAP annual requirements.

4.8.1. WC-135C qualified pilots that do not meet the currency event requirements for tanker air refueling (R041, R045, R046) will be considered non-current for the tanker air refueling only. These pilots may continue all other duties onboard the WC-135C provided they maintain currency in all other events.

4.8.2. Pilots that do not meet the currency requirements for P191 Landing Reverse Thrust will be considered non-current for this event only and will not become unqualified due to loss of currency for this event. These pilots may continue all other duties onboard to include landing (without the use of reverse thrust) provided they maintain currency in all other events.

4.8.3. Pilots will fly a sortie at least once each 90 days in each MDS aircraft they are qualified in to remain current in that MDS. Pilot transition currencies and pilot air refueling currencies can be logged in any -135 MDS. Pilots will comply with all other currency requirements for each aircraft. See chapter one for more information on MDS aircraft definitions.

4.8.4. Flight training accomplished during IMQT/RQT/DQT is not creditable to continuation training requirements. Pre- and Post-CFIC RC/OC/WC/TC-135 instructor upgrade training is creditable.

4.8.5. Pilots must have direct access to the controls of the aircraft or ATD to dual-log a training event. Instructor pilots do not need to be in the seat to perform/log instructor duties.

4.8.6. Instructors pilots may credit a takeoff if they are in the opposite pilot/copilot seat supervising the takeoff.

4.8.7. 338 CTS instructor pilots may credit/dual-log all continuation training events on sorties with unqualified students. The 338 CTS pilots must perform one M010 sortie per quarter. An IP flying on sortie S-1 may log an M010 when all syllabus demonstrations are completed.

4.8.8. BAQ pilot members will fly a supervised sortie with an instructor at least once every 60-calendar days.

4.8.9. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

4.8.9.1. Code . A complete description of the event code is found in Attachment 2.

4.8.9.2. Training Event . Name associated with code in Column 1.

4.8.9.3. BMC N/E . Lists the total number of events required annually for each BMC-N and BMC-E crewmember. If the column contains a blank box it is only required if a frequency is listed.

4.8.9.4. CMR N/E . Lists the total number of events required annually for each CMR-N and CMR-E crewmember. If the column contains a blank box it is only required if an associated frequency is listed in the **FREQ** column.

4.8.9.5. FREQ . List the required frequency each event must be accomplished in days.

4.8.9.6. NOTE . See notes at the end of table for additional information.

4.9. Progression from Non-experienced (N) to Experienced (E). The fourth letter in each pilot’s crew position designates experience levels. Use the following guidelines for determining the experience level for each pilot:

4.9.1. The minimum progression criteria for advancement from inexperienced to experienced is at squadron commanders discretion once pilots meet minimum requirements listed below (see chapter 3 for additional information on experience levels):

4.9.1.1. Copilots will have at least 500 total hours flying (not including "other" time) of which a minimum of 300 hours shall be as a CMR crewmember in the individuals primary aircraft.

4.9.1.2. A/Cs will have a minimum of 1500 total rated flying hours with 300 hours –135 time and be CMR as an aircraft commander for 6 months.

Table 4.6. Continuation Flight Training Annual Requirements (RAP and Non-RAP).

CODE	TRAINING EVENT	Crew	BMC N/E	CMR N/E	FREQ	Notes
M001	Sortie	All	16/8	36/24	1/45	5
M010	Proficiency sortie	All	4/2	6/4		
M021	RAP sortie	All	12/6	24/12		1
P010	Takeoff-initial	All	12/6	12/12	1/45	1
P040	Simulated EFTOC	IP/AC	4/2	6/4		
P060	Penetration (published)	All	2/1	4/2		3
P070	Instrument approach	All	12/6	36/24	1/45	
P100	Precision approach	All	4/2	12/8		
P110	Non-precision approach	All	4/2	12/8		
P130	Circling approach	All	2/1	4/2		
P160	Missed approach	All	4/2	6/4		
P170	Approach and go-around (simulated engine out)	IP/AC	4/2	6/4		
P180	Approach and landing (simulated engine out)	IP/AC	4/2	6/4	1/120	
P190	Landing	All	30/25	40/35	1/45	1,2
P191	Landing, full stop (reverse thrust, if applicable)	AC/IP			1/120	3
P192	Landing, night	All	6/3	6/3	1/120	
P198	Opposite seat sortie	AC			1/90	
P200	Touch and go landing	AC			1/30	
P210	Touch and go landing IP duties	IP			1/45	
P240	Landing gear alternate extension	All			1/180	
P250	Main flap emergency operation	All			1/180	
P280	ACDTQT	All			1/365	3
P310	Instructor/evaluator duties/techniques	IP			1/90	3
R010	Receiver A/R	AC/IP	15/10	20/15	1/45	1
R020	Receiver A/R night	AC/IP			1/120	
R030	Receiver A/R (heavyweight)	AC/IP			1/365	
R040	Receiver A/R breakaway	All	2/2	4/4		
R041	Tanker A/R	All	4/4	4/4	1/90	4
R045	Tanker A/R breakaway	All	2/2	2/2	1/180	4
R046	Tanker A/R autopilot off	All	2/2	2/2	1/180	4
R047	Tanker A/R (heavy weight)	All	2/2	2/2		4

Notes:

1. RAP Requirements.
2. Instructors may dual log this event
3. May be accomplished OFT.
4. WC-135C requirement only.
5. Pilots with multiple qualifications are required a sortie every 45 days in any –135 qualified in. Pilots must also meet the stipulations of paragraph 4.8.3. for multiple MDS qualifications.

4.10. Operational Flight Trainer (OFT).

4.10.1. Simulator training augments flight training; it does not replace it. Table 4.7 lists the pilot flight events creditable in the OFT.

4.10.2. Instructors and evaluators may credit an Instructor/Evaluator sortie when performing instructor/evaluator duties in-flight or in the simulator.

4.10.3. Because of the wide range of conditions and medications, the flight surgeon will need to determine whether an individual cannot perform training duties in the OFT, when placing the individual on DNIF status. Consideration must be given to the impact that the condition or medication will have on the individual's ability to learn from the OFT training.

Table 4.7. Pilot Flight Events Creditable in OFT.

CODE	TRAINING EVENT	NUMBER CREDITABLE
P007	Approach to initial buffet recovery (OFT only)	All
P012	T/O gyro mode	All
P018	Copilot takeoff/duties	All
P026	T/O climb procedures	All
P027	Combat departure	All
P040	Simulated engine failure, T/O continued	All
P050	Holding	All
P051	Fix-to-fix	All
P060	Penetration (published)	All
P100	Precision approach	All
P101	ILS approach	All
P102	ILS gyro mode	All
P110	Non-precision approach	All
P112	TACAN/VORTAC/LOCALIZER approach	All
P135	NDB approach	All
P160	Missed approach	All
P171	Approach/go around simulated engine out, rudder power off	All
P191	Landing, full stop, reverse thrust	All
P280	ACDTQT	All
P310	Instructor/evaluator duties/techniques	All
P311	Flight with an instructor	All
P364	Autopilot off cruise	All

Table 4.8. Senior Staff Qualification Training (SSQT).

CODE	TRAINING EVENT	PILOT	Note
A004	Senior staff course	1	
AA01	Qualification check	P	
G011	CPT	1	
G130	Instrument refresher course	1	
G252	Electrics and fuels simulator	1	
G253	Engines and pneumatics simulator	1	
G254	Flight controls and hydraulics simulator	1	
G260	Instrument simulator sortie	1	
G261	Normal procedures simulator	1	
LS08	Egress (non ejection)	1	
M001	Sortie	3P	
M021	RAP sortie	P	
N131	En route rendezvous	P	
N132	Point parallel rendezvous	P	
P007	Approach to initial buffet and recovery (OFT only)	P	
P010	Takeoff initial	2P	
P012	Gyro mode takeoff	P	
P015	Instrument departure	2P	
P040	Simulator engine failure, takeoff continued	2P	
P048	Three engine reverse thrust landing	P	1
P050	Holding	P	1
P061	En route descent	2P	
P101	ILS approach	P	
P103	PAR approach	P	
P112	TACAN/VOR/LOC approach	P	
P160	Missed approach	P	
P170	Approach and go (simulated engine out)	P	
P171	Approach and go-around, simulated engine out, rudder power off	1	1
P180	App and land (simulated engine out)	2P	
P190	Landing	3P	
P194	Landing, 30 degree flaps	1	
P197	Landing, full stop	P	
P200	Touch and go landing	P	
P360	Mission planning/briefing/critique	P	
P366	Checklist procedures/use	P	
P367	Crew coordination	P	
Q001	Open book qualification	1	
Q002	Closed book qualification	1	
Q005	ATD evaluation	1	
R012	Receiver A/R (day)	P	
R013	Receiver A/R overrun	1	
R040	Receiver A/R breakaway/practice emergency separation	P	

Notes:

1. May be accomplished in the simulator.

Chapter 5

NAVIGATOR TRAINING

5.1. General. This chapter specifies minimum training requirements for initial mission qualification, requalification, difference qualification, instructor, senior officer, and continuation training for 55th Wing assigned -135 aircraft.

5.1.1. The primary method of initial qualification is to attend and complete the appropriate formal training course listed in the ETCA.

5.1.2. Completing the appropriate formal course satisfies all qualification training requirements.

5.1.3. Use the following definitions for all training event tables throughout this chapter: **1** – the event must be accomplished at least one time during training; **AR** – As Required; **P** – train to a P (Proficient) level; **XP** – accomplish a minimum of X times. Student must reach the proficient level on at least one sortie to achieve the requirement. **F** – train to a familiar level.

5.2. Instructor Training and Supervision Requirements:

5.2.1. All instructors and evaluators must be graduates of KC-135 CFIC, ACC C-135 CFIC, or another MWS formal aircraft instructor upgrade course.

5.2.2. Only those instructors who have completed an instructor follow-on Faculty Training Course (FTC) or formal MAJCOM formal school instructor training course may conduct initial qualification flight training.

5.2.3. Instructors and evaluators may credit an Instructor/Evaluator sortie when performing instructor/evaluator duties in-flight. Instructors may credit/dual log flying continuation training events when performing training duties. No more than 50 percent of annual requirements may be dual logged. 338 CTS instructors may credit/dual log all continuation training events on sorties with unqualified students, however, these instructors must fly at least one solo RAP sortie for proficiency in each quarter.

5.3. Special Qualification Categories .

5.3.1. The squadron commander may determine certain special capabilities that navigators will need to maintain to accomplish certain missions. The unit's training flight will develop a training program for this capability and monitor currencies to maintain a core group of navigators proficient in the particular event. Send copies of these training plans and programs to HQ ACC/XOFR.

5.3.1.1. Celestial Navigation . Advances in technology have provided the opportunity to move away from celestial navigation requirements. However, celestial navigation provides an excellent failsafe source of position and heading information.

5.3.1.1.1. Navigators are required to learn basic celestial navigation skills during IMQT, RQT, DQT, and perform at least one celestial navigation leg during qualification training. The FTU will develop training procedures and standardized celestial training legs.

5.3.1.1.2. CMR/BMC navigators are not required to conduct in-flight celestial navigation legs for continuation training or evaluations unless directed by the SQ/CC. Some celestial events will be required for continuation training so crewmembers maintain a basic knowledge and

skill in these procedures (see table 5.6). Units will perform N045 in the aircraft (flight or ground).

5.3.1.2. GRID Navigation . The RC-135U/V/W will maintain a core group of navigators who are proficient in GRID navigation. This group will maintain SQ/CC directed currencies. This qualification is required for high-latitude navigation above 70 degrees North or below 60 degrees South.

5.3.1.3. Tanker Navigator . Some navigators will maintain multiple currencies in both tanker and receiver aircraft. Additional formal training may be required when flying without a boom operator or when maintaining multiple qualifications.

5.3.1.4. COMBAT SENT navigation . The COMBAT SENT typically deploys with 2 navigators. The lead navigator will be responsible for normal navigator duties. The second navigator will perform manual calculations, monitor altitudes, and perform celestial/GRID requirements. The unit will develop a training profile for navigators to practice these procedures prior to the deployment.

5.4. RAP Sorties . Navigators may log a RAP sortie on all operational mission and Busy Relays when authorized by the OG/CC. RAP sorties are designed to promote mission effectiveness and coordination among the mission area compartment personnel. These sorties are usually flown on mission aircraft with a mission crew. SQ/CCs may approve RAP sorties on front-end only trainers if the sortie simulates a full mission profile. Training flight will develop profiles to simulate an operational mission for these sorties.

5.5. Qualification Training. Table 5.1 outlines ground and flying training required to complete initial mission qualification training (IMQT), requalification training (RQT), difference qualification training (DQT), and senior staff qualification training (SSQT).

5.5.1. The difference qualification events listed in table 5.1 are designed as an aid in the unit's development of tailored training programs. Tailored programs should be based on the experience level of students and differences between platforms. Crewmembers transferring between –135 aircraft or those receiving multiple –135 qualifications will use difference qualification training (see chapter 2 for addition information on DQT). A minimum of two sorties are required for difference training. In addition, the items marked (P) proficient will be demonstrated to that level as a minimum.

5.5.2. Code . A complete description of the event code is found in Attachment 2.

5.5.3. Training Event . Name associated with code in column 1.

5.5.4. IMQT . Events marked in this column are required to complete initial mission qualification training course. See chapter 2 for more information.

5.5.5. RQT . Events marked in this column are required to complete the formal requalification training course. See chapter 2 for more information.

5.5.6. DQT . Events marked in this column are required to complete the difference qualification training course. See chapter 2 for more information.

5.5.7. SSQT. Events marked in this column are required to complete the senior staff qualification training course. See chapter 2 for more information.

Table 5.1. Navigator Flight Qualification Training. Notes are in parentheses.

CODE	TRAINING EVENT	IMQT	RQT	DQT	SSQT
A001	Initial mission qualification academics	1			
A004	Senior officer academics				1
A017	Regulation & directive knowledge	1	1	1	
A027	Initial recon/ops study	1	1 (1)	1 (1)	1 (1)
A029	Difference academics			1	
A034	Requalification academics		1		
AA01	Qualification check				P
G001	Flying safety training	1	1		1
G002	Supervisor safety training	AR	AR		AR
G003	Flight line security and driver's examination	1	1		1
G005	Marshaling exam	1	1		1
G006	US/Russia Prevention of Dangerous Military Activities	1	1		1
G010	CBWD	1	1		
G025	Aircraft field trip	1	1	1	1
G031	Initial SIOP C2 procedures	1 (1)	1 (1)	AR	
G033	Alert procedures	1 (1)	1 (1)	AR	
G035	PLZT goggles exercise	1 (1)	1 (1)	AR	
G036	Flash blindness/thermal protection	1 (1)	1 (1)	AR	
G040	SIOP study	1 (1)	1 (1)	AR	
G060	Tactics	1 (1)	1 (1)	AR	
G070	Aircrew intelligence	1 (1)	1 (1)	AR	
G080	Communications procedures	1	1		
G090	Anti-hijack	1	1		1
G100	Laws of armed conflict	1	1		1
G110	Protection from terrorism	1	1		1
G119	ISOPREP (initial)	1	1	AR	1 (1)
G130	Instrument refresher course	1	1	AR	1 (1)
G160	Over-water navigation procedures	P	P	AR	1
G170	CTD (RC-135)	3P	P	AR	1
G190	Aircraft servicing	1	1	AR	
G210	Alert start procedures/cartridge start procedures	1	1	AR	
G230	CRM refresher		1		1
G231	Initial CRM	1			
G280	Small arms training	1 (1)	1 (1)		
G300	Unit specific training	1 (1)	1 (1)	1	
G330	Unit mission brief	1	1	1	1
G632	Security clearance	1	1	AR	1
G633	Special survival training refresher course		1		1
GA02	SERE/code of conduct training	1	1		1
LS01	Local area survival (initial)	1 (3)	1 (1,3)		1 (1,3)
LS02	High threat combat survival training (HTCST)	AR (4)	AR (4)	AR (4)	AR (4)
LS03	Water survival training (WST)		1		1
LS04	Aircrew chemical defense equipment (ACDE)	1	1		1
LS06	Aircrew life support equipment (ALSE)	1	1	AR	1
LS08	Egress (non ejection)	1 (3)	1 (3)	1 (3)	1
LS011	Low threat combat survival training (LTCST)	AR (4)	AR (4)	AR (4)	AR (4)
M001	Sortie	10P	5P	2P	4P
M021	RAP sortie	5P	2P	P	3P
N045	Celestial position	1	1		
N046	Celestial navigation leg	1	1		

CODE	TRAINING EVENT	IMQT	RQT	DQT	SSQT
N050	RC-135U/V/W reconnaissance orbit area	P	P	AR	2P
N051	OC/WC-135 mission navigation leg	P	P	AR	2P
N052	RC-135S data run procedures	P	P	AR	2P
N070	Degraded navigation leg	P	P		
N100	INS airborne alignment	P	P		P
N102	INS present position update	P (2)	P (2)	P (2)	
N103	INS degraded operations	P	P		
N120	ARDA	P	P		
N130	Receiver rendezvous (dual log with N131 and N132)	8P	3P		2P
N131	En route rendezvous (receiver)	P	P		F
N132	Point parallel rendezvous (receiver)	P	P		F
N135	Receiver alternate rendezvous	P	P		F
N136	Receiver rendezvous overrun	P	P		F
P007	Approach to initial buffet/recovery (OFT only)	1	1		1
P240	Landing gear alternate extension	2P	P		P
P250	Main flap emergency operation	1	1		1
P270	Secure radio operation	P (1)	P (1)		F
P280	ACDTQT	1	1		
P360	Mission planning/briefing/critique	P	P	P	P
P366	Checklist procedures	P	P	P	P
P367	Crew coordination	P	P	P	P
P369	Aircraft/mission equipment operation	P	P	P	P
PP01	Flight physical	1 (3)	1 (3)	1 (3)	1 (3)
PP11	Physiological training (alt. Chamber)	1 (3)	1 (3)	1 (3)	1 (3)
Q001	Open book exam	1	1	AR	1
Q002	Closed book exam	1	1	AR	1
Q003	Mission qualification evaluation	P	P		
Q004	Difference qualification evaluation			AR	
Q010	SIOP certification	1	1 (1)		
Q011	Operational certification	1	1 (1)		
Q014	Difference certification			AR	
Q060	EMCON 3/4 procedures	1	1		
Q095	Flight publications check	1	1	1	1
R040	Receiver breakaway/practice emergency separation	P	P		P
R041	Tanker rendezvous			AR	
R042	Tanker A/R			AR	
R043	Tanker en route rendezvous			AR	
R044	Tanker point parallel			AR	
R045	Tanker A/R breakaway			AR	
R160	Radio silent breakaway	F	F		
R220	Manual boom latch	1	F		
R221	Limits demonstration	1	1		1
RR01	Flight records review	1 (3)	1 (3)		1 (3)
SS01	Combat survival course (S-V-80-A)	1			
SV83	Special survival training (S-V-83-A)	1	1 (1)	AR	1 (1)
WW01	Water survival course (S-V-90-A)	1			

CODE	TRAINING EVENT	IMQT	RQT	DQT	SSQT
NOTES: 1. If required. RQT students returning to fly after tours away from reconnaissance operations of 2 years or less are not required to complete the course. 2. N/A ASN-121 equipped aircraft. 3. Aircrew member is grounded until completed. 4. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.					

Table 5.2. Instructor Upgrade Flying Time Prerequisites.

Crew Position	Total Flying Time	Total RC/OC/WC-135 Time
Navigator	750 hours	150 hours
NOTE: Total flying time is career military flying time logged as a navigator. Time includes "student" and "other" time but does **NOT** include time logged in the simulator.		

5.6. Instructor Upgrade Training. Tables 5.2 and 5.3 outlines the prerequisites and ground and flying training requirements to upgrade from a basic navigator to an instructor navigator.

5.6.1. Code . A complete description of the event code is found in Attachment 2.

5.6.2. Training Event . Name associated with code in column 1.

5.6.3. Pre-CFIC . Events marked in this column are required prior to the instructor upgrade candidate entering formal CFIC training at the 338 CTS. See chapter 2 for more information.

5.6.4. CFIC . Events marked in this column are required to complete the formal instructor program at the FTU. See chapter 2 for more information.

5.6.5. IRQT . Events marked in this column are required to complete the instructor portion of the instructor requalification training program. IRQT students will accomplish all events in tables 5.1 and 5.3. IRQT events listed below emphasize instructor duties. See chapter 2 for more information.

Table 5.3. Instructor Navigator Qualification. Notes are in parentheses.

CODE	TRAINING EVENT	Pre-CFIC	CFIC	IRQT
A010	Instructor academics		1	1 (1)
A044	CFIC pre-attendance workbook	1		1
G170	Celestial training device	1	1	1 (1)
G232	Flight Instructor CRM Training		1	1
M001	Sortie	1	3P	P
M021	RAP sortie	1	2P	
N045	Celestial position	1	2 (5)	1 (5)
N050	RC-135U/V/W reconnaissance orbit area	1	2P	P (6)
N051	OC/WC-135 mission navigation leg	1	2P	P (6)
N052	RC-135S Data run procedures	1	2P	P (6)
N070	Degraded navigation leg		1P	
N100	INS airborne alignment	1	2P	
N102	INS present position update	1 (2)	1P (2)	
N103	INS degraded operations	1	1P	
N120	ARDA	F	1P	
N130	Receiver rendezvous	1	2P	
N180	Target timing wind	F	P	
P007	Initial buffet/recovery (OFT only)		1	
P240	Landing gear alternate extension	1	2P	
P250	Main flap emergency operation		1P (4)	P (4)
P310	Instructor duties & techniques	F	3P (7)	P (7)
P360	Mission prep/briefing/critique	1	3P	
P369	Aircraft equipment operation	1	P	1 (7)
Q008	Instructor evaluation		P	1 (3)

NOTES:

1. As determined by the unit squadron commander.

2. N/A ASN-121 equipped aircraft.

3. Navigator must complete RQT requirements in table 5.1. prior to instructor qualification evaluation.

4. Accomplish via ground lesson plan with an instructor pilot and a system mockup, if available or in the aircraft in-flight or on the ground with an instructor pilot.

5. Accomplish one day or one night LOP and a heading check.

6. Profile determined by primary MDS and unit.

7. FTU will develop training program to increase knowledge on aircraft systems. Emphasis will be placed on emergency equipment operation, circuit breakers and the location of this equipment.

5.7. Continuation Training. This section outlines ground and flying continuation training events required for all navigators to remain current.

5.7.1. Ground training. Table 5.4 contains a list of all ground training events. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

5.7.1.1. CMR (first column). The CMR assigned crewmembers must complete items marked with an X or CMR status will be lost.

5.7.1.2. GND . The aircrew member must complete items marked with an X or they will be grounded until accomplished.

5.7.1.3. Code . A complete description of the event code is found in Attachment 2.

5.7.1.4. Training Event . Name associated with code in Column 3.

5.7.1.5. CMR (fifth column). All CMR navigators must complete these items to remain current. Failure to accomplish could cause loss of qualification.

5.7.1.6. BMC . All BMC and API-6 navigators must complete these items to remain current. Failure to accomplish could cause loss of qualification. Unit SQ/CCs may require additional currency training depending on unit mission and unit requirements.

5.7.1.7. API 8 . All API 8 navigators must complete these items to remain current. Failure to accomplish could cause loss of qualification.

5.7.1.8. BAQ . All BAQ aircrew members must complete these items to remain current. Failure to accomplish could cause loss of qualification

5.7.1.9. NOTE . See notes at the end of table for additional information.

Table 5.4. Continuation Ground Training Requirements.

CMR	GND	CODE	TRAINING EVENT	CMR	BMC	API 8	(BAQ)	NOTE
X		A027	Ops study	Q	A			
		AA01	Qualification check				C	
		G001	Flying safety training	Q	Q	Q	Q	
		G006	US/Russia Prevention of Dangerous Military Activities	A	A			
		G010	CBWD	A	A			7
X		G030	SIOP C2 procedures	SA	SA			1,7
X		G040	SIOP study	SA	SA			1,7
		G060	Tactics	A	A			7
X		G070	Aircrew intelligence	A	A			7
X		G080	Comm procedures	A	A	A		7
		G090	Anti-hijack	B	B	B	B	
		G100	Laws of armed conflict	A	A	A	A	7
		G110	Protection from terrorism	A	A	A	A	
X		G120	ISOPREP review	SA				7
		G130	Instrument refresher course	C	C	C	C	
		G160	Over-water navigation procedures	A				
		G170	Celestial training device	SA				3, 4, 6
		G190	Aircraft servicing	A	A			7
X	X	G230	CRM	B	B	B	B	4
X		G280	Small arms training (SAT)	B	B			7
X		G330	Unit mission briefing	AR	AR	AR		7
X		G633	Special survival training refresher course	C*	C*			5,7
X		LS02	Combat survival training (high threat)	B	B	B	B	8
		LS03	Water survival training (WST)	B	B	B	B	
X		LS04	ACDE training	A	A			7
		LS06	Aircrew life support equipment (ALSE)	A	A	A	A	
X	X	LS08	Egress (non ejection)	A	A	A	A	
X		LS011	Low threat combat survival training (LTCST)	B	B	B	B	8
X	X	PP01	Flight physical	A	A	A	A	
X	X	PP11	Physiological refresher	AR	AR	AR	AR	
X		Q003	Mission qualification evaluation	C	C	C		
X		Q010	SIOP certification	C*	C*			1,2,7
X		Q011	Operational certification	SA	AR			
X		Q015	Special mission certification	AR	AR			6,7
		RR01	Flight records review	A	A	A	A	

NOTES:

1. Required for units with SIOP DOCs.
2. Includes SIOP certification and preparation for SIOP certification.
3. Instructors may dual-log this event.
4. Waiver authority is the 55 WG/CC.
5. RC-135 only.
6. If applicable.
7. Not applicable to MAJCOM/NAF DOV/OL-C AMCS/DT aircrew / instructors / evaluators.
8. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

5.7.2. Flight Training. Table 5.5 contains a list of all continuation flight training annual RAP requirements. Table 5.6 contains a list of all continuation flight training annual NON-RAP requirements. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

5.7.2.1. CODE . A complete description of the event code is found in Attachment 2.

5.7.2.2. TRAINING EVENT . Name associated with code in Column 1.

5.7.2.3. BMC N/E . Lists the total number of events required annually for each BMC-N and BMC-E crewmember. If the column contains a blank box it is only required if a frequency is listed.

5.7.2.4. CMR N/E . Lists the total number of events required annually for each CMR-N and CMR-E crewmember. If the column contains a blank box it is only required if an associated frequency is listed in the **FREQ** column.

5.7.2.5. FREQ . List the required frequency each event must be accomplished in days.

5.7.2.6. NOTE . See notes at the end of table for additional information.

5.7.3. Progression from Non-experienced (N) to Experienced (E). The fourth letter in each navigator's crew position designates experience levels. Use the following guidelines for determining the experience level for each navigator:

5.7.3.1. Navigators who are combat mission ready in the RC/OC/WC-135 for a minimum of 1 year and have either:

5.7.3.1.1. 2000 hours total rated flying time with 200 hours of M/S-135 time or

5.7.3.1.2. 1000 hours total rated flying time with 300 hours of M/S-135 time or

5.7.3.1.3. 500 hours total rated flying time in the M/S-135 assigned.

5.7.3.2. The squadron commander has the final authority for designating experience levels.

Table 5.5. Continuation Flight Training Annual RAP Requirements. This table lists minimum requirements and frequency.

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ	NOTE
M021	RAP sortie	12/6	24/12	1/60	
N050	Reconnaissance orbit area	6/4	8/6	1/90	2
N051	Mission navigation leg	6/4	8/6	1/90	1
N052	Data run procedures	6/4	8/6	1/90	2
N130	Receiver rendezvous	12/6	24/12	1/90	2

NOTES:

1. Not applicable to RC-135
2. Not applicable to OC-135

Table 5.6. Continuation Flight Training Annual Non-RAP Requirements. This table lists minimum requirements and frequency.

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ	NOTE
M001	Sortie	12/6	36/24	1/60	
M010	Proficiency sortie	4/3	6/3	1/120	
N045	Celestial position	2/1	4/2	1/180	
N047	GRID navigation leg	N/A	0/2		3
N048	Degraded navigation leg	2/1	4/2		
N120	ARDA		2/0		
N136	Receiver rendezvous overrun procedures	2/0	4/2		
P240	Landing gear alternate extension	2/1	3/1		
P250	Main flap emergency operation	1/1	2/1		2
P280	ACDTQT	1/1	1/1		1
P310	Instructor/evaluator duties			1/90	1
R040	Receiver A/R breakaway	2/2	2/2		
R042	Tanker rendezvous			1/90	3
R043	Tanker en route RZ			1/180	3
R044	Tanker point parallel			1/180	3
R045	Tanker A/R breakaway	2/2	2/2		3

NOTES: Navigators maintaining multiple qualification in another MDS must complete all currency requirements in their primary aircraft and, as a minimum, currencies specific to the secondary aircraft and those events determined by the squadron commander. AFORMS will track both currencies.

1. May be updated in CFT or power-on ground trainers.

2. Accomplish via ground lesson plan with an instructor pilot and a system mockup, if available or in the aircraft in-flight or on the ground with an instructor pilot.

3. As applicable. Determined by aircraft qualification(s) or special capabilities.

5.8. Navigation Leg Training and Procedures. The navigation leg is designed to exercise various navigation skills and to successfully direct the aircraft from a designated "Start Nav" point to a designated "End Nav" point within acceptable termination fix accuracy requirements. See AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures* for more information on general operational procedures.

5.8.1. Maintain an in-flight mission log on any media.

5.8.2. Do not accomplish navigation leg requirements during climb out, 10 minutes before or 10 minutes after AR rendezvous, descent before landing, IFR holding pattern, transition. Complete navigation leg requirements, including checklist items, not later than 10 minutes before the anchor track entry point, IAF, initial point of a standard arrival routes (STARS), or planned starting point for an en-route descent.

5.8.3. If a calculator or computer is used for NAVAID distance and bearing information (including conversion to geographical coordinates), record the NAVAID identification, time, radial, distance and magnetic variation.

5.8.4. A fix (radar primary) or most probable position (MPP) is required at the start navigation and end navigation points.

5.8.5. Announce final ETA prior to the end navigation point. Revise final ETA as necessary to keep the crew informed.

5.8.5.1. The navigation leg is complete when the end navigation fix is plotted. Do not alter or rework navigation leg data after the navigation leg is terminated. Alterations and entries to the chart and navigator's log may be made for clarification purposes only. Do not make log or chart alterations during penetration to final landing.

5.8.5.2. When navigation leg duration requirements cannot be met due to weather deviations, air route traffic control center (ARTCC) restrictions, adverse tailwind components, etc. credit may be awarded if the minimum requirements are met. Do not alter the navigation leg for convenience or pacing difficulties. The navigator will identify, plot, and relay an ETA for the adjusted "Start" or "End" navigation points prior to beginning or terminating the navigation leg.

5.9. Air Traffic Rules. See DOD FLIP, *General Planning* (Chap 6); DOD 4500.54-G, *Foreign Clearance Guide*; FAA Handbook 7610.4H, *Special Military Operations*; and AFI 11-202V3, *General Flight Rules*, for additional requirements or restrictions.

5.9.1. General Navigation. Unless authorized by the controlling agency, aircraft operating in controlled airspace under IFR on all routes published or unpublished, must fly along a direct course between NAVAIDs or fixes defining the route (AFI 11-202V3, *General Flight Rules*). Deviations from ARTCC approved routing will not exceed 10 nms (4 nms along airways) unless approved by ARTCC.

5.9.2. Navigation Leg—CONUS. Aircrews may deviate from centerline under the following provisions: obtain clearance for "celestial navigation" from ATC agency, have an operating IFF transponder, advise ATC agency before initiating a heading change greater than 20 degrees and when terminating celestial navigation. The aircraft will remain within 30 nms of course unless otherwise authorized.

5.9.3. Navigation Leg—Outside CONUS. Comply with the Foreign Clearance Guide and appropriate DOD FLIP Area Planning for course restrictions and clearance requirements. INS-autopilot steering is authorized. Center-line navigation is normally expected. Deviations exceeding 10 nms are generally considered a navigational error. Several countries have air traffic control agency provisions to conduct celestial navigation leg training, e.g. United Kingdom—"non-deviating status for astro-navigational training."

5.10. Navigation Legs—Description. Used for all continuation training, special capability training, qualification training or evaluations.

5.10.1. N046, Celestial Navigation Leg (Day or Night):

5.10.1.1. Purpose. Training, currency or transoceanic navigation.

NOTE: Typically flown only on a proficiency sortie or for over-water navigation when radar, a second INS or an independent GPS is not available.

5.10.1.1.1. Minimum accomplishments :

5.10.1.1.1.1. Minimum duration: 1.0 hour.

5.10.1.1.1.2. Two celestial LOPs. Should use multiple bodies if available.

5.10.1.1.1.3. Two celestial heading checks recorded and cross-checked against the magnetic compasses. The navigator will assess deviation and use if required.

5.10.1.1.1.4. Two radar fixes, if available (Start-Nav and End-Nav or coast out/in fixes may be used).

5.10.1.1.1.5. Cross-check system and fix/MPP at intervals not exceeding 30 minutes and at all turns greater than 20 degrees.

5.10.1.2. Procedures:

5.10.1.2.1. Steering by ASN-121 navigation system.

5.10.1.2.2. Carry a manual DR not exceeding 30 minutes.

5.10.1.2.3. Use a single, multiple, or averaged Line of Position (LOP) to verify or update a DR position. When using a calculator or computer to determine a celestial LOP, record the fix/MPP, time, body or bodies, assumed position, shot times, Zn, Hc, Ho and intercepts. On the celestial precomp, indicate if the calculator or computer adjusts the assumed position for Rhumb-Line, Coriolis, Precession, or Nutation, etc.

5.10.1.2.4. Compute celestial precomp information on AF Form 4046, **Celestial Pre-computation Form**. Record all data used to obtain the celestial LOP. A calculator or computer may be used to compute precomp information or to cross-check manually computed celestial precomp information. Ground celestial precomps are authorized; do not delay the mission for the sole purpose of using ground precomps.

5.10.1.3. Authorized Aids:

5.10.1.3.1. All modes and sub-modes of the ASN-121 navigation system.

5.10.1.3.2. Radar

5.10.1.3.3. TACAN/VOR

5.10.1.3.4. Doppler

5.10.1.3.5. Celestial information

5.10.1.3.6. DR

5.10.1.3.7. Handheld GPS

5.10.1.4. Accuracy Standards:

5.10.1.4.1. Maintain 100 percent of scored position within 10NM of planned course.

5.10.1.4.2. Maximum allowable terminal error: 10NM.

5.10.2. N047, Grid Navigation Leg (RC-135):

5.10.2.1. Purpose. Special capability training and currency.

5.10.2.1.1. Minimum Accomplishments:

5.10.2.1.1.1. Minimum duration: 1.0 hour.

5.10.2.1.1.2. Two celestial LOPs. Should use multiple bodies if available.

5.10.2.1.1.3. Two celestial heading shots cross-checked against the compasses each hour. Does not include grid entry or exit.

5.10.2.1.1.4. Two radar fixes, if available (start and end navigation fixes may be used).

5.10.2.1.1.5. Fix/MPP at intervals not exceeding 30 minutes and at all turns greater than 20 degrees.

5.10.2.1.1.6. Alter headings will be computed prior to all turns.

5.10.2.1.1.7. Compass cross-checks are required after all turns of 20 degrees or more.

5.10.2.2. Procedures:

5.10.2.2.1. All on board systems will be configured for grid.

5.10.2.2.2. Grid entry checklist will be accomplished within 10 minutes of start navigation.

5.10.2.2.3. Grid exit will be accomplished no earlier than 10 minutes prior to end navigation. Resolve compass differences exceeding 5 degrees or more.

5.10.2.2.4. Steering by ASN-121 navigation system.

5.10.2.2.5. ASN-121 will be used to the maximum extent.

5.10.2.2.6. Navigator will carry a manual DR.

5.10.2.3. Authorized Aids:

5.10.2.3.1. All modes and sub-modes of the ASN-121 navigation system.

5.10.2.3.2. Radar

5.10.2.3.3. TACAN/VOR

5.10.2.3.4. Doppler

5.10.2.3.5. Celestial information

5.10.2.3.6. DR

5.10.2.4. Accuracy Standards:

5.10.2.4.1. Maintain 100 percent of scored position within 10 NM of planned course.

5.10.2.4.2. Maximum terminal allowed error: 10 NM.

NOTE: Grid Navigation Leg currency will be at the discretion of the SQ/CC.

5.10.3. N048, Degraded Systems Navigation Leg:

5.10.3.1. Purpose. Continuation training and currency.

5.10.3.1.1. Minimum Accomplishments:

5.10.3.1.1.1. Minimum duration: 1.0 hour planned.

5.10.3.1.1.2. Designate start and end navigation points.

5.10.3.1.1.3. Four radar fixes. Does not include start and end navigation fixes.

5.10.3.1.1.4. Carry a manual DR from the start navigation fix until the end navigation point.

5.10.3.1.1.5. Fix/MPP at intervals not exceeding 30 minutes and immediately following all turns greater than 20 degrees.

5.10.3.2. Procedures:

5.10.3.2.1. INS steering and information is not authorized.

5.10.3.2.2. Navigator will carry and plot a manual DR.

5.10.3.2.3. Navigator will compute alter headings prior to all turns.

5.10.3.2.4. Radar will be manually configured to true north.

5.10.3.3. Authorized Aids:

5.10.3.3.1. Radar

5.10.3.3.2. TACAN/VOR

5.10.3.3.3. Doppler

5.10.3.3.4. Celestial information

5.10.3.3.5. DR

5.10.3.3.6. Hand-held GPS

5.10.3.4. Accuracy Standards:

5.10.3.4.1. Maintain 100 percent of scored position within 15 NM of planned course.

5.10.3.4.2. Maximum allowable terminal error: 15 NM.

5.10.4. N049, System Navigation Leg (OC/WC-135):

5.10.4.1. Purpose. Training and evaluation.

5.10.4.1.1. Minimum Accomplishments:

5.10.4.1.1.1. Minimum duration: 1.0 hour.

5.10.4.1.1.2. Two radar fixes if available.

5.10.4.1.1.3. Cross-check INS/GPS and fix/MPP position at intervals not exceeding 30 minutes.

5.10.4.2. Procedures:

5.10.4.2.1. Steering will be through inertial navigation system and autopilot coupled.

5.10.4.2.2. Inertial will be used to the maximum extent.

5.10.4.2.3. Maximum allowable error for position counters is 5NM.

5.10.4.3. Authorized Aids:

5.10.4.3.1. All modes and sub-modes of the inertial navigation system.

5.10.4.3.2. Radar

5.10.4.3.3. Doppler (WC-135)

5.10.4.3.4. TACAN, VOR, GPS (if available)

5.10.4.3.5. Handheld GPS

5.10.4.4. Accuracy Standards:

5.10.4.4.1. Maintain 100 percent of scored position within 10NM of planned course.

5.10.4.4.2. Maximum allowable terminal error: 10NM.

5.10.5. N050, Reconnaissance Orbit Area (RC-135U/V/W):

5.10.5.1. Purpose. Continuation training (RAP profile) and evaluation.

5.10.5.1.1. Minimum accomplishments :

5.10.5.1.1.1. Minimum duration: 1.0 hour.

5.10.5.1.1.2. Coordinate all turns and control the time to the start (entry) and end (exit) navigation point with the mission crew. Notify crew of variations due to mission changes.

5.10.5.1.1.3. Verify navigation systems every 30 minutes.

5.10.5.1.1.4. 4 radar fixes, if available (Start and End Navigation fixes may be used).

5.10.5.1.1.5. Cross-check system and fix/MPP at intervals not exceeding 30 minutes and at all turns greater than 20 degrees.

5.10.5.1.1.6. Simulate normal command and control procedures. Units will develop standard profiles that simulate typical operational sorties.

NOTE: An N050 may be logged on operational sorties when the aircraft enters the operational area.

5.10.5.2. Procedures :

5.10.5.2.1. Steering by ASN-121 navigation system.

5.10.5.2.2. Follow additional fixing and navigation requirements IAW AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*, chapter 9. Manually confirm aircraft is tracking to the next waypoint.

5.10.5.3. Authorized Aids:

5.10.5.3.1. All modes and sub-modes of the ASN-121 navigation system.

5.10.5.3.2. Radar

5.10.5.3.3. TACAN/VOR

5.10.5.3.4. Doppler

5.10.5.3.5. Celestial information

5.10.5.3.6. Handheld GPS

5.10.5.4. Accuracy Standards:

5.10.5.4.1. Maintain 100 percent of scored position within 10 nms of planned course.

5.10.5.4.2. Maximum allowable terminal error: 10 nms.

5.10.6. N051, Mission Navigation Leg (OC/WC-135):

5.10.6.1. Purpose. Training and evaluation. Can dual log with System Navigation Leg, if accomplished.

5.10.6.1.1. Minimum Accomplishments OC-135:

5.10.6.1.1.1. Minimum duration: 1.0 hour.

5.10.6.1.1.2. Three sensor legs

5.10.6.1.1.3. Two turns of 270 degrees

5.10.6.1.2. Minimum Accomplishments WC-135:

5.10.6.1.2.1. Minimum duration: 1.0 hour.

5.10.6.1.2.2. Expanding box

5.10.6.1.2.3. Sawtooth pattern

5.10.6.1.2.4. 360 degree turns

5.10.6.2. Procedures:

5.10.6.2.1. Steering should be through the inertial navigation system with autopilot coupled.

5.10.6.2.2. Inertial will be used to the maximum extent.

5.10.6.2.3. Maximum allowable error for position counters is 5 NM.

5.10.6.3. Authorized Aids:

5.10.6.3.1. All modes and sub-modes of the inertial navigation system.

5.10.6.3.2. Radar

5.10.6.3.3. Doppler (WC-135)

5.10.6.3.4. TACAN, VOR, GPS (if available)

5.10.6.4. Accuracy Standards:

5.10.6.4.1. Maintain 100 percent of scored positions within 10 NM of planned course.

5.10.6.4.2. Maximum allowable terminal error: 10 NM.

5.10.7. N052, Data Run Procedures (RC-135S):

5.10.7.1. Purpose. Continuation training (RAP profile) and evaluation.

5.10.7.1.1. Minimum accomplishments.

5.10.7.1.1.1. Minimum duration: 0.5.

5.10.7.1.1.2. Establish orbit at Top of Track. Forward maximum time on track and true heading to TC within 3 minutes after roll out and after all subsequent Data Run heading changes. Record Data Run information as required.

5.10.7.1.1.3. Verify navigation system every 30 minutes

5.10.7.1.1.4. Simulate normal command and control procedures. Units will develop standard profiles that simulate typical operational sorties.

5.10.7.1.1.5. Roll out Top of Track within 1 minute of designated time without degrading collection due to aircraft position.

5.10.7.1.1.6. Correct heading to within 2 degrees of desired data run heading no later than 3 minutes after roll out on data track.

5.10.7.1.2. Procedures :

5.10.7.1.2.1. Steering by ASN-121 navigation system.

5.10.7.1.2.2. Follow additional fixing and navigation requirements IAW AFI11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*, Chapter 9.

5.10.7.1.2.3. Follow additional fixing and navigation requirements IAW AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*, chapter 9. Manually confirm aircraft is tracking to the next waypoint.

5.10.7.1.3. Authorized Aids : ALL

5.10.7.1.4. Accuracy Standards :

5.10.7.1.4.1. Remain inside operating area, positioning the aircraft as necessary to facilitate data collection. En route corridor navigation requirements are a separate event and terminate at the roll in point (RIP) at top of track (TOT) and will resume within 5 minutes of the end of data track or receipt of the RTB.

5.10.7.1.4.2. Maintain aircraft true heading within 2 degrees

NOTE: An N052 may be logged on operational sorties when the aircraft enters the operational area.

5.11. Monitoring Navigation Leg Requirements:

5.11.1. The crew is responsible for monitoring aircraft position, observing air traffic control requirements, providing position reports, and ensuring safety-of-flight. Crew coordination and mission pacing are essential. The aircraft commander will designate a crewmember, other than the primary navigator(s), as aircraft position monitor.

5.11.2. The flight crew will cross-check ARTCC flight plans (DD Form 175, **Flight Plan**, or DD Form 1801, **DOD International Flight Plan**) with mission flight plan to ensure accuracy.

5.11.3. Plot the navigation leg portion of the flight on an appropriate chart (e.g. TPC, ONC, JNC or GNC) before flight. Annotate the chart with the mission number, aircraft position monitor's name and date. Reuse charts if practical.

5.11.4. The aircraft position monitor (normally the copilot position) will obtain and record precision fix or automatic DR present position information on the navigation report.

5.11.5. Monitor each navigation leg for fix/MPP, corridor, and terminal circular error (CE) requirements. Alter the aircraft heading as necessary to avoid special use airspace and remain within appropriate ARTCC protected airspace. Request additional ARTCC corridor clearance if required. The crew will coordinate aircraft heading changes and specific fix/MPP pacing requirements during the navigation leg.

5.11.6. Use all existing navigation aids to monitor the aircraft position. The following aids are available:

5.11.6.1. Precision fix [multiple radio bearing, TACAN, radar, GPS (MAJCOM approved) position].

5.11.6.2. TACAN-aided INS or DNS

5.11.6.3. Automatic DR (INS, INS/INS, approved GPS present positions coordinates) or cross-track function

5.11.7. Pilots will record and plot a precision fix at Start-Nav and End-Nav (final ETA) positions at the coordinated time and every 12 minutes (plus or minus 3 minutes), each additional designated fix/MPP time, and after roll out for turns exceeding 20 degrees.

5.11.8. During re-routed navigation legs due to weather, ARTCC vectors, etc., corridor monitoring will reflect new routing from the time and position the clearance is given. Redraw new routing on the appropriate chart.

5.12. Reconstructing, Scoring, and Review (RSR):

5.12.1. Local units determine RSR requirements. Activities include assigning, reviewing, filing, and determining corrective action, if appropriate. As a minimum, include the following: navigator qualification evaluations, MAJCOM or NAF (ASEV, etc.) evaluations, and suspected navigational incident Category I/Over-water missions.

5.12.2. Reconstruct navigation legs using the navigator's in-flight log, chart, celestial data, navigation report, position monitor chart, and any additional supporting documentation. Legible photocopies of the charts are sufficient.

5.12.3. Procedures. On the navigator's chart, reconstruct all aircraft position monitor precision fix information as recorded on the Navigation Report. Compute solutions for all celestial observations and re-plot all lines of position (LOP). Circle errors in red - record and plot correct information in blue.

5.12.4. Establish a total re-plot position for the final ETA. The re-plot officer will carry properly computed cumulative data (i.e. heading, airspeed) from the start navigation point to the navigator's end navigation ETA. Compare this re-plot final DR with the intended destination to compute Circular Error. The difference is total computation and plotting error, and reflects how much the accumulation of all the navigation errors caused the destination to be missed.

5.12.5. Compare the re-plot final DR with the terminal fix (End-Nav fix) to compute Reconstruction Difference. This distance is an indication of how well the navigator averaged instrument readings.

5.12.6. Score each fix/MPP for appropriate DR and celestial accuracy standards.

5.12.7. Review and summarize the navigation leg overall performance. Debrief the navigator on re-plot results before flying the next navigation leg, but in no case later than 10 duty days after the mission or as determined by local units. ANG and USAFR units will complete the debrief not later than the next UTA following assignment of the RSR.

5.13. AF Form 4045, Navigation Report:

5.13.1. General Information. Complete form by appropriate crewmember. Use two forms if accomplishing a navigation leg by two navigators (augmented crew) on the same mission.

5.13.1.1. Blocks 1-8--Identification Information. Self-explanatory.

5.13.1.2. Block 4--Sextant Correction. Enter the computed sextant correction factors as it applies to the Hc.

5.13.1.3. Blocks 10-12--Navigation Category Information. Self-explanatory.

5.13.2. Position Accuracy Data (complete by aircraft position monitor):

5.13.2.1. Block 13--Position Accuracy Data. See requirements in paragraphs 9.8 and 9.9 (completed by the aircraft position monitor).

5.13.2.2. Block 14--Termination Fix. Compute in nms; distance from planned or re-planned End-Nav point to End-Nav terminal fix time.

5.13.3. Control Time and Position Accuracy Data (completed by aircraft position monitor):

5.13.3.1. Block 15. Desired position and time (normally filled in during mission planning).

5.13.3.2. Block 16. Use when a second control time exercise is used on the same mission.

5.13.4. Computation, Plotting Error, and Navigation Accuracy Standard Sum mary (complete by RSR officer):

5.13.4.1. Block 17. Record each position time used by the navigator to determine fix/MPP.

5.13.4.2. Block 18--LOP Number. Enter a number for each celestial and radio aid bearing or distance in the sequence they were taken.

5.13.4.3. Block 19--Precomputation Error (Celestial Observation Only). An error resulting from incorrect information on the precomp, i.e. wrong LHA, addition or subtraction errors, motion errors, azimuth, etc. Include suspect errors, e.g. observation, acceleration and wander error.

5.13.4.4. Block 20--Plotting Error. An error caused by incorrect celestial information on the chart, i.e. LOP plotted incorrectly, either intercept or azimuth plotted in error, erroneous assumed position, DR, etc. Include NAVAID plotting error.

5.13.4.5. Block 21--Other Error. As required, describe error in remarks. Reference to position number and time.

5.13.4.6. Block 22--LOP Error. Enter the total error value for each LOP used to determine the fix/MPP. If average information, use the outline block.

5.13.4.7. Block 23--DR Error. Enter the difference, in nms, measured from the navigator's DR to the RSR determined DR. Include erroneous drift, groundspeed, time, elapsed time, or failure to properly use or compute compass deviation or gyro precession as the error effects the DR.

5.13.4.8. Block 24--Fix/MPP Error. Enter the difference, in nms, measured from the navigator's fix/MPP to the RSR determined fix/MPP. Do not include computation error points.

5.13.4.9. Block 25--Circular Error. Complete by the RSR officer.

5.13.4.10. Block 26--Reconstruction Difference. Complete by the RSR officer.

5.13.4.11. Block 27--Summary. Apply DR and LOP accuracy standards to Blocks 23 and 24 for each position. Apply termination fix or circular error requirement based on type of navigation leg flown (Block 10). Critique all errors. RSR will make an overall recommendation and check the appropriate box. For evaluations and qualification requirements, apply appropriate evaluation criteria and determine overall qualification; "Successful" equals Q1, "Need Training" equals Q2, and "Re-accomplish" equals Q3.

5.13.4.12. Block 28--Remarks. Self-explanatory.

5.13.4.13. Block 29-32--Signatures. Self-explanatory.

5.13.4.14. Reconstruction Officer Comments. Self-explanatory.

5.13.4.15. Reviewing Officers Comment. Self-explanatory.

5.13.5. Additional Considerations:

5.13.5.1. Do not downgrade a navigator for an error resulting from a previous error.

5.13.5.2. An error affecting one LOP only is considered as one error, even when the LOP is subsequently averaged with other LOPs, e.g. a math error in computing an intercept, motion error affecting only one LOP. Determine the magnitude of the error by comparing the correct intercept with the erroneous intercept values for that single LOP, not the effect on the average LOP.

5.13.5.3. An error affecting more than one LOP derived from the same celestial body is considered one error, e.g., incorrect tab Hc, motion error, etc. Determine the magnitude of the error by comparing the correct average intercept with the erroneous average intercept.

5.13.5.4. There will be no more than one overall DR error awarded for each DR position. The magnitude of the error is the distance between the final DR and the re-plotted DR. Do not score DR used to calculate assumed positions.

5.13.5.5. Azimuth errors and celestial plotting errors in azimuth used to establish celestial fixes or MPPs should be graded as plotting errors.

5.13.5.6. Grade an erroneous computation of an LHA or an entry into the sight reduction tables using an incorrect LHA, DEC, or LAT as one MAJOR error.

5.13.5.7. Use MAJCOM approved, Pressure Pattern Navigation Worksheet to assist the navigator in determining and plotting pressure pattern LOPs. Use MAJCOM approved, Celestial Precomputation Form to assist the navigator in determining celestial LOPs.

5.13.6. Magnitude of Errors:

5.13.6.1. MINOR. An error affecting a DR or LOP more than 4 but less than 10 nms or an azimuth error more than 5 degrees but less than 15 degrees. Award one point for each minor error.

5.13.6.2. SIGNIFICANT. An error affecting a DR or LOP more than 10 but less than 16 nms or an azimuth error more than 15 degrees but less than 25 degrees. Award two points for each significant error.

5.13.6.3. MAJOR. An error exceeding the criteria of SIGNIFICANT. Award four points for each major error.

5.13.7. Grades. Total the points for all errors and refer to table 5.7 to determine the grade. If the navigator terminates a briefed navigation leg without reason before the accomplishment of the minimum number of LOPs, the grade is Q-3. If a navigator's computation, plotting, steering, or DR errors directly cause a navigation leg to exceed the termination CE standards established in this chapter, the grade for this area will be Q-3.

Table 5.7. Navigation Leg Grading Criteria.

	Grade Awarded	
LOPs Accomplished	**Q-2 Error Points Exceeded**	**Q-3 Error Points Exceeded**
1-5	5	8
6	6	9
7	7	10
8	8	11
9	9	12
10	10	14
11	Number of LOPs	15

Chapter 6

ELECTRONIC WARFARE OFFICER (EWO) TRAINING

6.1. General. This chapter specifies minimum EWO training requirements for initial mission qualification, requalification, difference qualification, instructor, senior officer, and continuation training for 55th Wing assigned -135 aircraft. Any officer to be trained as an RC-135 EWO at the 338CTS must be a graduate of the (453 FTS at Mather AFB or the 563 FTS at Randolph AFB) Electronic Warfare Officer Course.

6.1.1. The primary method of initial qualification is to attend and complete the appropriate formal training course listed in the ETCA.

6.1.2. Completing the appropriate formal course satisfies all qualification training requirements.

6.1.3. Use the following definitions for all training event tables throughout this chapter: **1** – the event must be accomplished at least one time during training; **AR** – As Required. **P** – train to a P (Proficient) level. **XP** – accomplish a minimum of X times to a proficient level. Student must be proficient on at least one sortie to achieve the requirement. **F** – train to a familiar level.

6.2. Instructor Training and Supervision Requirements:

6.2.1. All instructors and evaluators must be graduates of C-135/E-4 CFIC, ACC C-135 FIDC, or another MWS formal aircraft instructor upgrade course.

6.2.2. Only those instructors who have completed the Faculty Training Course (FTC) or a formal MAJCOM school instructor training course may conduct initial qualification academic training.

6.2.3. Instructors and evaluators may credit an instructor/evaluator sortie when performing instructor/evaluator duties in-flight. Instructors may credit/dual log flying continuation training events when performing training duties

6.3. Special Qualification Categories . The squadron commander may determine the special capabilities EWOs will need to maintain to accomplish certain missions. The unit's training flight will develop a training program for this capability and maintain adequate currencies to maintain a core group of EWOs proficient in the particular event. Send copies of these training plans and programs to HQ ACC/XOFR.

6.4. RAP Sorties . EWOs may log a RAP sortie on all operational missions and Busy Relays on mission aircraft when authorized by the OG/CC. RAP sorties are designed to promote mission effectiveness. Unit training managers will develop profiles to simulate operational missions on local training flights. EWOs may log a RAP sortie when the following criteria are met. The waiver authority for this paragraph is HQ ACC/XOF.

6.4.1. RC-135U/V/W. Flight includes event E052.

6.4.2. RC-135S. Flight includes event E051.

Table 6.1. EWO Flight Qualification Training.

CODE	TRAINING EVENT	IMQT	RQT	DQT	SSQT
A001	Initial qualification academic course	1			
A004	Senior staff academic course				1
A017	Regulation & directive knowledge	1	1	1	
A027	Initial recon/ops study	1	1 (1)	1 (1)	1 (1)
A029	Difference academic course			1	
A034	Requalification academic course		1		
AA01	Qualification evaluation				P
E051	Data run procedures (RC-135S)	P	P	AR	P
E052	Electronic warfare activity period (RC-135U/V/W)	P	P	AR	P
G001	Flying safety training	1	1	1	1
G002	Supervisor safety training	AR	AR	AR	AR
G003	Flight line security and driver's examination	AR	AR	AR	AR
G010	CBWD	1	1	AR	
G025	Aircraft field trip	1	1	1	1
G033	Alert procedures	1 (1)	1 (1)	1 (1)	
G040	SIOP study	1 (1)	1 (1)	1 (1)	
G060	Tactics	1 (1)	1 (1)	1 (1)	
G070	Aircrew intelligence	1 (1)	1 (1)	1 (1)	
G090	Anti-hijack	1	1	1 (1)	1
G100	Laws of armed conflict	1	1	1 (1)	
G110	Protection from terrorism	1	1	1 (1)	
G119	ISOPREP initial	1	1	1	1 (1)
G190	Aircraft servicing	1	1	1	
G230	CRM refresher		1	1 (1)	1
G231	Initial CRM	1			
G280	Small arms training	1 (1)	1 (1)	1 (1)	
G330	Unit mission brief	1	1	1	
G632	Security clearance	1	1	1	1
GA02	SERE/code of conduct training	1	1	1	1
LS01	Local area survival (initial)	1 (2)	1 (1,2)	1 (1,2)	1 (1,2)
LS02	High threat combat survival training (HTCST)	AR (3)	AR (3)	AR (3)	AR (3)
LS03	Water survival training (WST)		1	1	1
LS04	ACDE	1	1	1 (1)	1
LS06	Aircrew Life Support Equipment (ALSE)	1 (2)	1 (2)	1 (2)	1 (2)
LS08	Egress (non ejection)	1 (2)	1 (2)	1(1,2)	1 (2)
LS011	Low threat combat survival training (LTCST)	AR (3)	AR (3)	AR (3)	AR (3)
M001	Sortie	8P	3P	3P	3P
M021	RAP Sortie	4P	2P	2P	2P
P007	Approach to initial buffet/recovery (OFT only)	1	1	1	
P280	ACDTQT	1	1	1 (1)	
P360	Mission planning/briefing/critique	P	P	P	P
P366	Checklist procedures	P	P	P	P
P367	Crew coordination	P	P	P	P
P369	Aircraft/mission equipment operations	P	P	P	P
PP01	Flight physical	1 (2)	1 (2)	1 (2)	1 (2)
PP11	Physiological training (alt. Chamber)	1 (2)	1 (2)	1 (2)	1 (2)
Q001	Open book exam	1	1	1 (1)	1
Q002	Closed book exam	1	1	1 (1)	1
Q003	Mission qualification evaluation	P	P		
Q004	Difference qualification evaluation			AR	
Q010	SIOP certification	1	1 (1)	1 (1)	
Q011	Operational certification	1	1 (1)	1 (1)	
Q014	Difference certification			AR	
RR01	Flight records review	1 (2)	1 (2)	1 (2)	1 (2)
SS01	Combat survival course (S-V-80-A)	1			
SV83	Special survival training (S-V-83-A)	1	1 (1)	1 (1)	1
WW01	Water Survival Course (S-V-90-A)	1			

CODE	TRAINING EVENT	IMQT	RQT	DQT	SSQT
NOTES:					
1. If required. RQT students returning to fly after tours away from reconnaissance operations of 2 years or less are not required to complete the course.					
2. Aircrew member is grounded until completed.					
3. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.					

Table 6.2. Instructor Upgrade Flying Time Prerequisites (See Notes).

Crew Position	Total Flying Time	Total -135 Time
EWO	600 hours	and 300 hours
NOTE: Total flying time is career military flying time logged in the crew position the individual will upgrade in. Time includes "student" and "other" time but does not include time logged in the simulator. The OG/CC may waive the minimum flying hour requirements for instructor upgrade.		

6.5. Instructor Upgrade Training. Tables 6.2 and 6.3 outlines the prerequisites and ground and flying training requirements to upgrade from a basic electronic warfare officer to an instructor electronic warfare officer.

6.5.1. Code . A complete description of the event code is found in Attachment 2.

6.5.2. Training Event . Name associated with code in column 1.

6.5.3. Pre-CFIC . Events marked in this column are required prior to the instructor upgrade candidate entering formal CFIC training at the 338 CTS. See chapter 2 for more information.

6.5.4. CFIC . Events marked in this column are required to complete the formal instructor program at the FTU. See chapter 2 for more information.

6.5.5. IRQT . Events marked in this column are required to complete the instructor portion of the instructor requalification training program. IRQT students will accomplish all events in tables 6.1 and 6.3. IRQT events listed below emphasize instructor duties. See chapter 2 for more information.

Table 6.3. Instructor EWO Qualification.

CODE	TRAINING EVENT	Pre-CFIC	CFIC	IRQT
A010	Instructor academics		1	1 (1)
A044	FIDC pre-attendance workbook	1		1 (1)
AA01	Qualification check		1	1
G232	Flight Instructor CRM Training		1	1
M001	Sortie	1	3P	
M021	RAP sortie		2P	
P310	Instructor duties & techniques	1	3P	3P
P360	Mission planning/briefing/critique	1	3P	P
P369	Aircraft equipment operation	P	P	P
Q008	Instructor evaluation		P	(2)

NOTES: 1. As determined by the unit squadron commander.

2. Must also accomplish EWO RQT requirements (Table 6.1.).

6.6. Tactical Coordinator Upgrade.

6.6.1. The units will designate candidates for TC upgrade. Training will consist of both academic and flight phases. Table 6.4 directs the events required for upgrade.

6.6.2. Use the initial qualification tactical coordinator (IQTC) column to upgrade all initial TC candidates. Use the requalification tactical coordinator (RQTC) column to upgrade any formerly qualified TC.

Table 6.4. Tactical Coordinator Upgrade.

CODE	TRAINING EVENT	IQTC	RQTC
A015	TC academics	1	(3)
AA01	Qualification check	1	1
E051	Data run procedures	P (1)	P (1)
E052	EW activity procedures	P (2)	P (2)
P360	Mission planning/briefing/critique	P	P
P366	Checklist procedures	P	P
P367	Crew coordination	P	P
P369	Aircraft equipment operation	P	P

NOTES:

1. RC-135 S only

2. RC-135 U,V,W only

3. As determined by the unit squadron commander.

6.7. Continuation Training. This section outlines ground and flying training requirements for all EWOs. All aircrew members will accomplish the requirements as shown on table 6.5 and 6.6.

6.7.1. Ground training. Table 6.5 contains a list of all ground training events. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

6.7.1.1. CMR (first column). The CMR assigned crewmembers must complete items marked with an X or CMR status will be lost.

6.7.1.2. GND . The aircrew member must complete items marked with an X or they will be grounded until accomplished.

6.7.1.3. Code . A complete description of the event code is found in Attachment 2.

6.7.1.4. Training Event . Name associated with code in Column 3.

6.7.1.5. CMR (fifth column). All CMR EWOs must complete these items to remain current. Failure to accomplish could cause loss of qualification.

6.7.1.6. BMC . All BMC and API-6 EWOs must complete these items to remain current. Failure to accomplish could cause loss of qualification. Unit SQ/CCs may require additional currency training depending on unit mission and unit requirements.

6.7.1.7. API 8 . All API 8 EWOs must complete these items to remain current. Failure to accomplish could cause loss of qualification.

6.7.1.8. BAQ . All BAQ aircrew members must complete these items to remain current. Failure to accomplish could cause loss of qualification

6.7.1.9. NOTE . See notes at the end of table for additional information.

Table 6.5. Continuation Ground Training Requirements.

CMR	GND	CODE	TRAINING EVENT	CMR	BMC	API 8	BAQ	NOTE
X		A027	Ops study	Q	A			
		AA01	Qualification check				C	
		G001	Flying safety training	Q	Q	Q	Q	
		G010	CBWD	A	A			6
X		G040	SIOP study	SA	SA			1,6
		G060	Tactics	A	A			6
X		G070	Aircrew intelligence training	A	A			6
		G090	Anti-hijack	B	B	B	B	
		G100	Laws of armed conflict	A	A	A	A	6
		G110	Protection from terrorism	A	A	A	A	
X		G120	ISOPREP review	SA				6
		G190	Aircraft servicing	A	A			6
X	X	G230	CRM	B	B	B	B	3
X		G280	Small arms training	B	B			6
X		G330	Unit mission briefing	AR	AR	AR		6
X		G633	Special survival training refresher course	C*	C*			5,6
X		LS02	High threat combat survival training (HTCST)	B	B	B	B	7
		LS03	Water survival training (WST)	B	B	B		
X		LS04	ACDE training	A	A			6
		LS06	Aircrew life support equipment (ALSE)	A	A	A	A	
X	X	LS08	Egress training	A	A	A	A	
X		LS011	Combat survival low threat (LTCST)	B	B	B	B	7
X	X	PP01	Flight physical	A	A	A	A	
X	X	PP11	Physiological refresher	AR	AR	AR	AR	
X		Q003	Mission qualification evaluation	C	C	C		
X		Q010	SIOP certification	C*	C*			1,2,6
X		Q011	Operational certification	SA	AR			
X		Q015	Special mission qualification	AR	AR			4,6
		RR01	Flight records review	A	A	A	A	

NOTES:1. Required for units with SIOP DOCs.

2. Includes SIOP Certification and Preparation for SIOP Certification.

3. Waiver authority is the WG/CC.

4. As determined by WG/CC.

5. RC-135 only.

6. N/A to MAJCOM/NAF DOV/OL-C AMCS/DT Aircrew / Instructors / Evaluators.

7. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

6.7.2. Flight Training. Table 6.6. contains a list of all continuation flight training annual RAP requirements. Table 6.7. contains a list of all continuation flight training annual NON-RAP requirements.

6.7.2.1. CODE . A complete description of the event code is found in Attachment 2.

6.7.2.2. TRAINING EVENT . Name associated with code in Column 1.

6.7.2.3. BMC N/E . Lists the total number of events required annually for each BMC-N and BMC-E crewmember. If the column contains a blank box it is only required if a frequency is listed.

6.7.2.4. CMR N/E . Lists the total number of events required annually for each CMR-N and CMR-E crewmember. If the column contains a blank box it is only required if an associated frequency is listed in the **FREQ** column.

6.7.2.5. FREQ . List the required frequency each event must be accomplished in days.

6.7.2.6. NOTE . See notes at the end of table for additional information.

6.7.3. Progression from Non-experienced (N) to Experienced (E). The fourth letter in each EWO's crew position designates experience levels. Use the following guidelines for determining the experience level for each EWO:

6.7.3.1. EWOs who are combat mission ready in the RC/OC/WC-135 for a minimum of 1 year and have either:

6.7.3.1.1. 2000 hours total rated flying time with 200 hours RC-135 time or

6.7.3.1.2. 1000 hours total rated flying time with 300 hours RC-135 time or

6.7.3.1.3. 500 hours RC-135 time.

6.7.3.2. The squadron commander has the final authority for designating experience levels.

Table 6.6. Continuation Flight Training Annual RAP Requirements. Table lists minimum requirements and frequency.

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ
M021	RAP sortie	12/6	24/12	1/60

Table 6.7. Continuation Flight Training Annual Non-RAP Requirements. Table lists minimum requirements and frequency.

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ	NOTE
M001	Sortie	12/6	24/12	1/60	
M010	Proficiency sortie	4/3	6/3	1/120	
P240	Landing gear alt/emergency extension			1/180	1
P280	ACDTQT			1/365	2
P310	Instructor/evaluator duties			1/90	3

NOTES:

1. RC-135S instructors may dual log event.
2. May be updated on power-on ground trainers.
3. May be updated in RJMT or power-on ground trainers.

Chapter 7

INFLIGHT/SENSOR MAINTENANCE TECHNICIAN

7.1. General. This chapter specifies minimum training requirements for initial qualification, requalification, and difference qualification courses for -135 aircraft.

7.1.1. The primary method of initial qualification is to attend and complete the appropriate formal training course listed in the ETCA.

7.1.2. Completing the appropriate formal course satisfies all qualification training requirements. When attendance is not practical or quotas are not available, units may request waivers to conduct in-unit qualification training, using formal training and/or school courseware.

7.1.3. Use the following definitions for all training event tables throughout this chapter: **1** – the event must be accomplished at least one time during training; **AR** – As Required; **P** – train to a P (Proficient) level; **XP** – accomplish a minimum of X times. Student must reach the proficient level on at least one sortie to achieve the requirement; **F** – train to a familiar level.

7.2. RAP Sorties . IMT/SMT may log a RAP sortie on all operational missions and Busy Relays on mission aircraft when authorized by the OG/CC. RAP sorties are designed to promote mission effectiveness. Unit training managers will develop profiles to simulate operational missions on local training flights. IMT/SMT may log a RAP sortie when the following criteria are met. The waiver authority for this paragraph is HQ ACC/XOF.

7.2.1. RC-135S/U/V/W. Sortie profile includes a flight with an electronic warfare crew conducting an E051/E052 (as applicable) and all necessary maintenance systems.

7.2.2. OC-135. As determined by SQ/CC.

7.2.3. IMT/SMT can not log a RAP sortie on TC-135S/W.

7.3. Qualification Training. Table 7.1 outlines IMT/SMT ground and flying training required to complete initial mission qualification training (IMQT), requalification training (RQT), and difference qualification training (DQT).

7.3.1. CODE . A complete description of the event code is found in Attachment 2.

7.3.2. TRAINING EVENT . Name associated with code in column 1.

7.3.3. IMQT . Events marked in this column are required to complete initial mission qualification training course. See chapter 2 for more information.

7.3.4. RQT . Events marked in this column are required to complete the formal requalification training course. See chapter 2 for more information.

7.3.5. DQT . Events marked in this column are required to complete the difference qualification training course. See chapter 2 for more information.

Table 7.1. IMT/SMT Flight Qualification Training Events.

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
A001	Initial mission qualification academics	1			
A017	Regulation and directive knowledge	1	1	1	
A027	Initial recon/ops study	1	1		5,9
A029	Difference course			1	
A034	Requalification course		1		
G001	Flying safety training	1	1		
G002	Supervisor safety	AR	AR	AR	
G003	Flight line security/driver's license	1	1		
G010	CBWD	1	1		
G025	Aircraft field trip	1	1	1	
G033	Alert procedures	1	1		9
G070	Aircrew intelligence training	1	1		
G090	Anti-hijack	1	1		
G100	Law of armed conflict	1	1		
G110	Protection from terrorism	1	1		
G119	ISOPREP (initial)	1	1		5,6
G190	Aircraft servicing	1	1	AR	
G230	CRM refresher		1		
G231	Initial CRM	1			
G280	Small arms training	P	P		7
G300	Unit specific training	1	1	AR	9
G330	Unit mission briefing	1	AR		6
G632	Security clearance	1	1		
G633	Special survival refresher course		1		1
GA02	SERE/code of conduct training	1	1		
LS01	Local Area Survival	1	AR		
LS02	High threat combat survival training (HTCST)	AR	AR	AR	2,4,10
LS03	Water survival training (WST)		1		
LS04	ACDE	1	1		5
LS06	Aircrew life support equipment (ALSE)	1	1	AR	
LS011	Low threat combat survival training (LTCST)	AR	AR	AR	8,10
M001	Sortie	P	P	P	3
M021	RAP sortie	P	P	P	
P007	Initial buffet/recovery (OFT only)	1	1		
P076	Normal and emergency operations/procedures	P	P	P	
P079	In-flight trouble analysis/prioritization	P	P	P	
P240	Landing gear alt/emergency extension	P	P	P	9
P280	ACDTQT	1	1		5
P341	Mission documentation	P	P	P	
P360	Mission planning/briefing/critique	P	P	P	
P366	Checklist procedures	P	P	P	
P367	Crew coordination	P	P	P	
P369	Aircraft equipment operation	P	P	P	
PP01	Flight physical	1	1		
PP11	Physiological training (alt. Chamber)	1	1		
Q001	Open book exam	1	1	AR	
Q002	Closed book exam	1	1	AR	
Q003	Mission qualification evaluation	P	P		
Q004	Difference qualification evaluation			AR	
Q011	Operational certification	1	1		5,9
Q014	Difference Certification			AR	
Q015	Special Mission Qualification	P	P	P	9
Q017	Treaty Orientation Course	1	1	1	8
Q095	Flight publications check	P	P	P	
RR01	Flight records review	1	1		
SS01	Combat survival course (S-V-80-A)	1			
SV83	Special survival training (S-V-83-A)	1	1		5,9
T001	Safety practices	1	1	1	
T003	Mission material/CTK procedures	P	P	P	
T004	Special equip ops/procedures	P	P	P	5,9
T005	IMT data run procedures	P	P	P	2
T006	Security procedures	P	P	P	5

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
T007	Quick response crew procedures	P	P	P	2
T008	Optics care and handling	P	P	P	2,5,8
T009	Optical systems ops/procedures	P	P	P	2,5,8
T010	Digital distribution systems	P	P	P	1,5
T011	Laser system ops/procedures	P	P	P	2
T012	Laser system safety	P	P	P	2
T013	Film based camera ops/procedures	P	P	P	
T014	Foreign/domestic VIP briefing	P	P	P	8
T019	Preflight/post-flight procedures	P	P	P	
T020	Aircraft A/C system	P	P	P	1,5
T021	Mission equipment location	P	P	P	
T022	Power distribution system	P	P	P	
T023	Maintenance station operation	P	P	P	1,5
T024	Mission compartment test equipment	P	P	P	5
T025	Magnetic/digital storage systems	P	P	P	5
T026	RF distribution system	P	P	P	1,5
T027	IF/Video distribution system	P	P	P	1,5
T028	System calibration/tests	P	P	P	
T029	DF/receiver systems	P	P	P	1,5
T030	Automatic collection systems	P	P	P	1,5
T031	Manual collection systems	P	P	P	1,5
T032	Computer systems	P	P	P	5
T040	Timing and reference signal distribution	P	P	P	5
T041	Blanking systems	P	P	P	4
T042	LRU Locations	P	P	P	
T043	Signal flow	P	P	P	
T044	Test/signal routing	P	P	P	
T045	System Operation	P	P	P	
T046	Isolate and correct malfunctions	P	P	P	
T047	Interpret subsystem operation	P	P	P	
T048	Perform under reduced capabilities	P	P	P	
WW01	Water survival course (S-V-90-A)	1			

NOTES:

1. Not Applicable to RC-135S IMT 2.

2. RC-135S.

3. Minimums specified in syllabus.

4. RC-135U/V/W.

5. Not applicable to SMT.

6. Mission ready crewmembers transferring between units need only receive unit specific training in these events prior to being declared mission ready at their gaining unit.

7. Individuals may be declared mission ready without completing event G280.

8. OC-135B.

9. If required. RQT students returning to fly after tours away from reconnaissance operations of 2 years or less are not required to complete the course.

10. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

7.4. Instructor initial/requalification training. This program upgrades IMT and SMT crewmembers to instructor status. See chapter 2 for more information.

Table 7.2. Instructor Upgrade Flying Time Prerequisites (See notes).

Crew Position	Total Flying Time	Total -135 Time
IMT/SMT	600 hours	300 hours

NOTES:

1. Total flying time is career military flying time logged in the crew position the individual will upgrade in. Time includes “student” and “other” time.

2. 55 OG/CC may waive the minimum flying hour requirements for instructor upgrade.

3. Requires minimum of 1-year as a CMR ready IMT/SMT.

7.4.1. IMT instructor candidates will have a minimum of 3 flights acting in the role of instructor in addition to completing a formal flight instructor course. All sorties will be flown under the supervision of a qualified instructor. All academics will be completed prior to the flight phase.

7.4.2. Tables 7.2 and 7.3 lists the ground and flight training events required for initial instructor upgrade training. IMT/SMT instructor requalification will be accomplished using the same table, however, the candidates will also complete the events in table 7.1 under the RQT column.

7.4.3. Individuals who have completed RC-135 CFIC are not required to re-accomplish A010, instructor academic training. Instructor requalification events may be accomplished concurrently with basic requalification events.

Table 7.3. IMT/SMT Instructor Initial/Requalification Requirements.

CODE	TRAINING EVENT	IMT	SMT
A010	Instructor academics	1	1
A017	Publications and directives	AR	AR
A044	CFIC pre-attendance workbook	1	1
G232	Flight Instructor CRM Training	1	1
M001	Sortie	3P	3P
M021	RAP sortie	P	P
P310	Instructor duties & techniques	P	P
P360	Mission planning/briefing/critique	P	P
P367	Crew coordination	P	P
P369	Aircraft/mission equipment operation	P	P
Q008	Instructor evaluation	P	P
T001	Safety practices	P	P
T018	Training documentation	P	P

7.5. Continuation Training. This section outlines ground and flying training requirements for all IMT/SMT. All aircrew members will accomplish the requirements as shown on table 7.4, 7.5 and 7.6.

7.5.1. Ground training. Table 7.4 contains a list of all ground training events. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under “frequency.”

7.5.1.1. CMR (first column). The CMR assigned crewmembers must complete items marked with an X or CMR status will be lost.

7.5.1.2. GND . The aircrew member must complete items marked with an X or they will be grounded until accomplished.

7.5.1.3. CODE . A complete description of the event code is found in attachment 2.

7.5.1.4. TRAINING EVENT . Name associated with code in column 3.

7.5.1.5. FREQ . All BMC/CMR follow the same frequency guidance. IMT/SMT crewmembers must complete these items to remain current. Failure to accomplish could cause loss of qualification.

7.5.1.6. NOTE . See notes at the end of table for additional information.

Table 7.4. IMT/SMT Continuation Ground Training Requirements.

CMR	GRD	CODE	TRAINING EVENT	FREQ	Note
X		A027	Initial Recon/Ops study (RC-135)	Q	1
		G001	Flying safety training	Q	
		G010	CBWD	A	
X		G070	Aircrew intelligence training	A	
		G090	Anti-hijack	B	
		G100	Laws of armed conflict	A	
		G110	Protection from terrorism	A	
X		G120	ISOPREP review	SA	
		G190	Aircraft servicing	A	
X	X	G230	CRM	B	
X		G280	Small arms training (SAT)	B	
X		G330	Unit mission briefing	AR	
X		G633	Special survival training refresher course	C*	
X		LS02	High threat combat survival training (HTCST)	B	2
		LS03	Water survival training (WST)	B	
X		LS04	ACDE Training	A	
		LS06	Aircrew life support equipment (ALSE)	A	
X	X	LS08	Egress training	A	
X		LS011	Low threat combat survival training (LTCST)	B	2
X	X	PP01	Flight physical	A	
X	X	PP11	Physiological refresher	AR	
X		Q003	Mission qualification evaluation	C	
X		Q011	Operational certification	SA	1
		RR01	Flight records review	A	

Notes:

1. As required.

2. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

7.5.2. Flight Training. Table 7.5 contains a list of all continuation flight training annual RAP requirements. Table 7.6 contains a list of all continuation flight training annual Non-RAP requirements.

7.5.2.1. CODE . A complete description of the event code is found in Attachment 2.

7.5.2.2. TRAINING EVENT . Name associated with code in Column 1.

7.5.2.3. BMC N/E . Lists the total number of events required annually for each BMC-N and BMC-E crewmember. If the column contains a blank box it is only required if a frequency is listed.

7.5.2.4. CMR N/E . Lists the total number of events required annually for each CMR-N and CMR-E crewmember. If the column contains a blank box it is only required if an associated frequency is listed in the **FREQ** column.

7.5.2.5. FREQ . List the required frequency each event must be accomplished in days.

7.5.2.6. NOTE . See notes at the end of table for additional information.

7.5.3. Progression from Non-experienced (N) to Experienced (E). The fourth letter in each IMT's crew position designates experience levels. Use the following guidelines for determining the experience level for each IMT:

7.5.3.1. An IMT who is combat mission ready in the RC -135 for a minimum of 1 year and have either:

7.5.3.1.1. 2000 hours total flying time with 200 hours RC-135 time or

7.5.3.1.2. 1000 hours total flying time with 300 hours RC-135 time or

7.5.3.1.3. 500 hours RC-135 time.

7.5.3.2. An SMT who is combat mission ready in the OC-135 for a minimum of 1 year and have either:

7.5.3.2.1. 1000 hours total flying time with 100 hours OC-135 time or

7.5.3.2.2. 250 hours OC-135 time.

7.5.3.3. The squadron commander has the final authority for designating experience levels.

Table 7.5. Continuation Flight Training Annual RAP Requirements (RC/OC/WC-135).

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ	NOTE
M021	RAP Sortie	12/6	24/12	1/60	1
T005	IMT data run procedures			1/60	
T013	Film based camera operations/procedures	12/6	24/12	1/60	2
NOTES: 1. Instructors may dual-log this flight event. 2. SMT only					

Table 7.6. Continuation Flight Training Annual Non-RAP Requirements.

CODE	TRAINING EVENT	BMC N/E	CMR N/E	FREQ	NOTE
M001	Sortie	12/6	24/12	1/60	
M010	Proficiency sortie	4/2	6/4		
P240	Landing gear alternate/emergency extension			1/365	1,2
P280	ACDTQT			1/365	1
P310	Instructor/evaluator duties/techniques			1/90	
NOTES: 1. Instructors may dual-log this flight event. 2. RC-135 U/V/W and OC-135B.					

7.6. ATD Credit for Training Requirements. Simulator training augments flight training; it does not replace it. COBRA BALL IMT flight events and currencies (not including M001 sortie) may be updated in a suitable ATD. RIVET JOINT/COMBAT SENT/COBRA BALL IMTs may credit ACDTQT in the Simulator, power on ground trainer or ATD.

Chapter 8

AIR INTELLIGENCE AGENCY GENERAL GUIDANCE

8.1. Responsibilities:

8.1.1. Air Intelligence Agency/67 Intelligence Wing will:

8.1.1.1. Determine training requirements to meet expected unit tasking.

8.1.1.2. Submit MAJCOM supplements to HQ USAF/XOOT, through HQ ACC/XOFR, for approval before publication.

8.1.1.3. Review subordinate unit supplemental instructions and supplemental training programs annually.

8.1.1.4. Review and update changes to instructional texts.

8.1.1.5. Standardize aircrew flying training requirements.

8.1.1.6. Approve all AIA aircrew training courses and syllabi and approve any changes.

8.1.1.7. Determine the number of training quotas needed to meet operational requirements.

8.1.1.8. Provide policy and guidance in order for units to develop their respective training programs.

8.1.1.9. Attach flyers (except for 67 IW) to a flying squadron and designate an appropriate training level. Provide MAJCOM with a list of Basic Mission Capable (BMC) and Combat Mission Ready (CMR) designated manning positions annually. Review programs and manning position designations annually.

8.1.1.10. Identify training shortfalls that adversely impact combat capability.

8.1.2. Intelligence Groups will:

8.1.2.1. Review subordinate unit training programs.

8.1.2.2. Develop programs to ensure training objectives are met. Assist subordinate units in management of training programs, ensure programs meet unit needs, and provide staff support.

8.1.2.3. Establish procedures with the servicing military personnel flight (MPF) for individual counseling and personnel system updates for the active duty service commitment (ADSC) incurred. Training conducted according to AFI 11-2RC-135V1, *RC/OC/WC/TC-135 Aircrew Training* that is intended to result in initial qualification, requalification, or upgrade in a crew position may result in an ADSC per AFI 36-2107, *Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC),* and the education and training course announcement (ETCA).

8.1.2.4. Identify training shortfalls that adversely impact combat capability.

8.1.2.5. Be responsible for progress reviews.

8.1.3. SQ/CCs will:

8.1.3.1. Ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned/attached aircrew.

8.1.3.2. Ensure training and evaluation records of newly-assigned aircrew members are reviewed to determine the training required to achieve BMC or CMR

8.1.3.3. Determine missions/events in which individual BMC aircrew will maintain qualification versus familiarization.

8.1.3.4. Determine utilization of BMC aircrew.

8.1.3.5. Determine how many and which BMC and CMR aircrew will carry special capabilities/ qualifications.

8.1.3.6. Identify levels of supervision needed to accomplish required training, unless specifically directed.

8.1.3.7. Assist in developing the 67 IW-common training programs.

8.1.3.8. Monitor individual assigned/attached aircrew currencies and requirements.

8.1.3.9. Ensure aircrew members only participate in sorties, events, and tasks for which they are adequately prepared, trained, and current.

8.1.3.10. Identify areas where additional training is needed and direct training accordingly.

8.1.3.11. Ensure mission objectives are pre-briefed, debriefed, and evaluated to determine successful accomplishment.

8.1.4. Individual aircrew members will:

8.1.4.1. Ensure all available training records are forwarded to assist the gaining unit in assessing qualifications and training requirements.

8.1.4.2. Be responsible for completion of training requirements and currencies within the guidelines of this instruction.

8.1.4.3. Ensure they participate only in ground and flying activities for which they are qualified and current, unless under the direct supervision of a qualified instructor/evaluator

8.1.4.4. The SOSM section will ensure the training and qualification status are correctly documented and tracked in AFORMS.

8.2. Processing Changes: Send recommended changes to this volume to 67 OSS/OST for coordination and forwarding to HQ AIA on AF Form 847, **Recommendation for Change of Publication**. HQ AIA will send recommended changes to HQ ACC/XOFR, 205 Dodd Blvd, Suite 101, Langley AFB VA 23665-2789, for coordination and forwarding to HQ USAF/XOOT.

8.3. Phases of Training. Aircrew training is designed to progress aircrew from Initial Qualification Training (IQT) or Difference Qualification/Requalification Training (DQT/RQT), through Mission Qualification Training (MQT).

8.3.1. Initial Mission Qualification Training (IMQT). IMQT provides the training necessary to initially qualify or requalify aircrew in a basic position and flying duties to perform the missions assigned to a specific unit. Completion of IMQT is a pre-requisite for BMC and CMR. Upon completion of IMQT or DQT/RQT the aircrew member attains Basic Aircraft Qualification (BAQ) status. BAQ is not a long-term qualification status. Waiver authority for any crewmember, other than general officers, to remain BAQ will be 67 IW/CC.

8.3.2. Continuation Training (CT). Specific mission-related training required to accomplish the unit's assigned missions.

8.3.2.1. Combat Mission Ready (CMR). CMR positions are designated for line active flyers within the squadron. CMR aircrew members maintain proficiency and qualification in all core missions of the flying unit to which they are assigned or attached. CMR aircrew maintain currencies which affect CMR status, accomplish all core designated flight training, and all mission ground training. Failure to complete this training or maintain these currencies results in regression to Non-CMR (N-CMR) status. While N-CMR, aircrew may perform events that they are current in, and either familiar or proficient and qualified in, similar to BMC aircrew.

8.3.2.2. Basic Mission Capable (BMC). All other active duty aircrew positions are designated BMC positions. BMC positions are filled by aircrew who have a primary job performing wing supervision or staff functions that directly support the flying operation. However, these aircrew are required to provide additional sortie generation capability, either in lieu of or in addition to, the personnel assigned to the flying squadrons. BMC aircrew will maintain familiarization with all unit core missions. They may also maintain proficiency and qualification in some of the unit core missions. For those missions in which they maintain familiarization only, BMC aircrew must be able to attain proficiency and qualification in 30 days or less. BMC flyers accomplish all mission-related ground training. BMC aircrew may deploy and may participate in any mission for which they are proficient and qualified, without additional training, as determined by the 67 IW/DO.

8.3.2.3. N-CMR/N-BMC. Aircrew members who regress to N-CMR/N-BMC status will accomplish a tailored re-certification program to regain CMR/BMC status as specified by the 67 IW/DO.

8.3.3. Specialized Training. Specialized training is training in any special skills necessary to carry out the unit's assigned missions. Units will identify and create specialized training programs to meet unique mission requirements IAW HQ AIA, 67 IW, and local unit operating instructions. Unless otherwise specified, aircrew in CMR or BMC positions may hold special capabilities/qualifications as long as any additional training requirements are accomplished.

8.4. Training Concepts and Policies:

8.4.1. Training programs will be designed to achieve the highest degree of combat readiness consistent with flight safety and resource availability. Training must balance the need for realism against the expected threat, aircrew capabilities, and safety. This instruction provides training guidelines and policies to be used with operational procedures specified in applicable flying/operations publications.

8.4.2. 67 IW will develop and validate wing-common training programs (with the assistance of the operational units) when/where tasked.

8.4.3. Training missions will be designed to achieve combat capability in squadron tasked roles, maintain proficiency, and enhance mission accomplishment and safety. Training missions should emphasize either basic combat skills or scenarios that reflect procedures and operations based on employment plans, location, current intelligence, and opposition capabilities. Use of procedures/actions applicable to combat scenarios is desired.

8.4.4. In-flight supervision will be carried out as follows: Use flight evaluators and instructors for any phase of training to capitalize on their expertise and experience.

8.4.4.1. Normally, SEFEs should not evaluate their students or those they recommended for upgrade.

8.4.4.2. Instructor Training, Supervision, and Usage

8.4.4.2.1. Instructors will comply with requirements of this instruction.

8.4.4.2.2. An instructor must supervise the following personnel when performing aircrew duties.

8.4.4.2.2.1. All non-current aircrew members.

8.4.4.2.2.2. All aircrew members in initial, difference, upgrade, or requalification flying training.

8.4.4.2.2.3. Unqualified aircrew members as defined in AFI 11-202V1, *Aircrew Training*, and any other staff personnel the Wing, OG equivalent, or SQ/CCs designate are required to fly with an instructor.

8.4.4.2.2.4. Every attempt should be made to ensure instructor continuity for crewmembers in initial, mission qualification, requalification, difference training, and upgrade training.

8.5. Ready Aircrew Program (RAP) Policy and Management: RAP does not apply to AIA aircrew members.

8.6. Training Records and Reports . Units will maintain aircrew records for individual training and evaluations IAW AFI 11-401; *Flight Management*, AFI 11-202V1; *Aircrew Training*, AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, AFMAN 37-139, *Records Disposition Schedule*; and appropriate MAJCOM directives.

8.6.1. Units will document and maintain aircrew certification/upgrade training in individual training records IAW AFMAN 37-139, *Records Disposition Schedule*.

8.6.2. Units will prepare and forward training reports IAW MAJCOM directives.

8.6.3. Units using AFORMS will maintain flying and ground training records IAW appropriate AFIs and supplements.

8.6.4. Units will track ground training, airborne training, and currency information for all aircrew members (as applicable).

8.6.5. Training Record Management is accomplished as follows:

8.6.5.1. Training Record Requirements. A training record will be initiated for initial qualification, requalification, mission qualification, special qualification, difference, upgrade and additional training directed by the squadron commander or a flight examiner. The training record will include training reports, all waivers and other applicable records. The training documents will be placed in reverse chronological order with the most recent on top.

8.6.5.1.1. Formal school records will be sent out or hand-carried by the individual to the gaining unit for review and incorporation into the individual's training record.

8.6.5.1.2. Crewmembers who PCS or PCA will have their applicable training records forwarded to the gaining unit.

8.6.5.2. Training Record Review:

8.6.5.2.1. The SQ/CC, SQ/DO, SQ/LG, or designated representative will conduct an Operations Review of active training records prior to a flight evaluation needed to complete the training program. Operations review will be a separate entry in the training record and should reflect the student's progress. Active training records are records of crew members undergoing initial, mission qualification, requalification, difference, upgrade, special qualification or commander directed additional training.

8.6.5.2.2. Instructors will review training records prior to each training period (flight or simulator) to develop a training plan. After each period, instructors will document training in sufficient detail to accurately assess student performance and make recommendations for subsequent training. At the satisfactory completion of all required training, instructors will make a recommendation for an in-flight evaluation. Students will review and initial training records after each training period.

8.6.5.3. History of Training:

8.6.5.3.1. The Flight Evaluation Folder (FEF) has basic source documents, which provide a current history of each individual's flying qualification IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and appropriate MAJCOM supplement. Include in Section I of the FEF, under the AF Forms 942, **Record of Evaluation**, all certifications and special mission qualifications not annotated on AF Form 8, **Certificate of Aircrew Qualification**. Use AF Form 1381, **USAF Certification of Aircrew Training**. Do not replicate the AF Form 1381 for the purpose of adding a required entry.

8.6.5.3.2. Maintain aircrew-training records in assigned squadron for one year following completion of training or upon completion of a subsequent upgrade program.

8.7. Intra-command Transfer of Aircrews. Validated training completed prior to transfer will be honored by the gaining organization and will be used to determine the appropriate training phase where the newly assigned aircrew member is placed.

8.8. Aircrew Utilization Policy:

8.8.1. Commanders will ensure that wing/group aircrew members fill authorized positions IAW unit manning documents and that aircrew member status is properly designated. The overall objective is that aircrew members perform mission-related duties. For aircrew members in the first year of their initial operational assignment, supervisors should limit the non-flying duties to those related to mission-related activities.

8.8.2. Aircrew members whose status is "duty not including flying" (DNIF) may log ground training events, including simulator, if the member's physical condition allows it. The flight surgeon who signs the AF 1042, **Medical Recommendation for Flying or Special Operational Duty**, placing the crewmember in DNIF status, should be consulted if the crewmember's ability to complete training is in question.

8.9. Waiver Authority:

8.9.1. The waiver authority for all requirements and provisions in chapters 8 and 9 of this instruction is the 67 IW/CC unless specifically noted otherwise in the appropriate section.

8.9.2. Provide the information directed in chapter 1 for all waivers.

Chapter 9

AIA INTELLIGENCE OPERATORS AND AIRBORNE MAINTENANCE TECHNICIAN TRAINING

9.1. General. This chapter specifies minimum training requirements for qualification and difference qualification for AIA personnel on-board the RC-135 aircraft.

9.2. General Requirements . The primary method of qualification is to complete the appropriate formal training course listed in the ETCA followed by in-unit qualification training.

9.3. Instructor Training and Supervision Requirements:

9.3.1. All instructors and evaluators will be appointed and approved by unit Commander IAW HQ 67 Intelligence Wing Instructions and AFI 11-202 Vol 2, *Aircrew Standardization/Evaluation Program.*

9.3.2. Units are encouraged to use flight evaluators as instructors for qualification training and upgrade training programs as required. However, if an evaluator is used as a primary instructor to train an individual during a training program, the same evaluator should not administer the evaluation that completes the training program.

9.4. Prerequisites:

9.4.1. Before entering qualification training, each aircrew member must comply with the appropriate formal course training prerequisites prescribed in the ETCA.

9.4.2. All personnel on flying status (IAW AFI 11-202V1, *Aircrew Training*) will meet the following requirements before flying:

9.4.2.1. Physiological training (AFI 11-202V1, *Aircrew Training*)

9.4.2.2. Flight physical (AFI 11-202V1, *Aircrew Training*)

9.4.2.3. Aircraft Egress Training (AFI 11-301, *Aircrew Life Support (ALS) Program*)

9.4.2.4. Flight Records Review

9.4.3. Intelligence Operators: X1N3XX AFSC require a “3” skill level or higher, X1N2XX AFSC require a “5” skill level or higher.

9.4.4. Airborne Maintenance Technician (AMT) require a 2A1X7 AFSC and a “3” skill level or higher. (Exception: 2A900 and 2A000 can come out of any 2AXXX avionics feeder AFSC)

9.5. Difference Qualification Training (DQT). In some instances, it will be necessary for units to form an initial cadre of personnel for new systems whom certain training requirements may be waived. When possible, qualified personnel in other units will provide the initial cadre for their flight training. 67 IW instructors will be considered the primary instructors with augmentation by Detachment 2, 645 MATS personnel for conversion training when new systems come online.

9.5.1. The following conditions apply to management of initial cadre aircrew qualification: Form a nucleus of instructor and flight examiner personnel (initial cadre) to begin aircrew conversion. Initial cadre will not be designated in a crew position higher than currently held.

9.5.2. Complete all applicable ground and flight instruction involving any equipment, systems or crew procedures which differ from that in the mission series (M/S)-135 aircraft in which qualified.

9.5.3. Accomplish Q002, Closed Book Qualification Examination, prior to unsupervised flight when emergency procedures are different.

9.5.4. Q014, Difference Certification, is the squadron commander's certification that all difference training is complete. Unit standardization and evaluation will document difference qualification in the individual's FEF. When individuals receive difference certification at other than home station, where the records are not available, the host unit will document and maintain difference certification in letter format and forward to individuals home station for inclusion in the FEF.

9.6. Ground Training:

9.6.1. For in-unit qualification training, commanders will obtain and use the currently approved formal training or school courseware if available (see the ETCA):

9.6.1.1. Academic training will be accomplished as directed in applicable courseware or in-unit training plan.

9.6.1.2. Egress and local area survival training must be completed before the first flight. Accomplish initial egress training on the aircraft.

9.6.1.3. Ground training accomplished during initial qualification, difference, or requalification training establishes due dates for subsequent continuation training.

9.7. Flying Training. Approved in-unit training must be accomplished according to published guidance and formal or approved school courseware if available and the following guidance:

9.7.1. Table 9.1 lists the appropriate ground and flight requirements for RC-135 Intelligence Operators (IO) initial, requalification and difference qualification training as applicable.

9.7.2. Table 9.2 lists the appropriate ground and flight requirements for RC-135 AMT initial, requalification and difference qualification training as applicable

9.7.3. Use the following definitions for all training event tables throughout this regulation: **"1"** - the event must be accomplished at least one time during training; **"AR"** - As Required; **"P"** - train to a Proficient level; **"XP"** - accomplish a minimum of X times at a P (Proficient) level. **"F"** - train to a familiar level.

Table 9.1. Intelligence Operators (IO) qualification training.

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
A001	Initial qualification academic course.	1			
A017	Regulation and directive knowledge	1			3
A029	Difference academic course			1	
A034	Requalification academic course		1		
G001	Flying safety training	AR	AR	AR	
G002	Supervisor safety training	AR	AR	AR	
G003	Flight line security/driver's examination	AR	AR		
G010	CBWD	1	1	1	
G025	Aircraft field trip	1	1		
G090	Anti-hijack	1	1	1	
G100	Laws of armed conflict	1	1	1	
G110	Protection from terrorism	1	1	1	
G119	ISOPREP initial	1			
G230	CRM refresher		AR	AR	
G231	Initial CRM	1			
G280	Small arms training	1	1	AR	
G300	Unit mission brief	1	1		
G632	Security clearance	1	1		
G633	Special survival training refresher course		1	1	
GA02	SERE/code of conduct training	1	1		
I001	Safety	P			
I002	Equipment/systems knowledge	P			
I003	Equipment/systems operations	P			
I004	Tactical planning	P			
I005	Employment	P			
I006	Data collection	P			
I007	Data recording	P			
I008	Data dissemination	P			
I009	Collection debrief	P			
LS01	Local area survival (initial)	1			1
LS02	High threat combat survival training (HTCST)	AR	AR	AR	2
LS03	Water survival training(WST)		1	1	
LS04	Aircrew chemical defense equipment (ACDE)	1	1	1	
LS06	Aircrew life support equipment (ALSE)	1	1	1	
LS08	Egress (Non-ejection)	1	1	1	1
LS011	Low threat combat survival training (LTCST)	AR	AR	AR	2
M001	Sortie	AR	AR	AR	
P076	Emergency procedures	P			
P280	ACDTQT	1	1	1	
P341	Communications, logs and reports	P			
P360	Mission preparation, briefing and critique	P	P	P	
P366	Checklist procedures	P	P	P	
P367	Crew coordination	P	P	P	

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
P369	Aircraft equipment operation	P	P	P	
PP01	Flight physical	1	1	1	1
PP11	Physiological training (altitude chamber)	1	1	1	1
Q001	Open book exam	AR	AR	AR	
Q002	Closed book exam (EP)	1	1	1	
Q003	Mission qualification evaluation	1	1		
Q004	Difference qualification evaluation			AR	
Q011	Operational certification	AR	AR	AR	
Q014	Difference certification			AR	
Q095	Flight publications check	1	1	1	
RR01	Flight records review	1	1	1	1
SS01	Combat survival course (S-V-80-A)	1			
SV83	Special survival training (S-V-83-A)	1		AR	
T006	Security procedures	P	P	P	
WW01	Water survival course (S-V-90-A)	1			

Notes:

1. Aircrew member is grounded until completed.

2. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

3. Include applicable manuals and operating instructions as directed by 67 IW.

Table 9.2. AMT Flight Qualification Training.

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
A001	Initial qualification academic course	1			
A017	Regulation and directive knowledge	1	1	1	1
A029	Difference academic course			1	
A034	Requalification academic course		1		
G002	Supervisor safety training	AR	AR	AR	
G003	Flight line security and drivers examination	1	1	1	
G010	CBWD training	1	1	1	
G025	Aircraft field trip	1	1	1	
G090	Anti-hijack	1	1	1	
G100	Laws of armed conflict	1	1	1	
G110	Protection from terrorism	1	1	1	
G119	ISOPREP (initial)	1			
G230	CRM refresher		1	1	
G231	Initial CRM	1			
G280	Small arms training	1	1	1	
G300	Unit specific training	AR	AR	AR	
G330	Unit mission briefing	1	1	1	
G632	Security clearance	1	1	1	
G633	Special survival training refresher course		1	1	
GA02	SERE/code of conduct training	1	1	1	
I001	Safety	P			
I002	Equipment/systems knowledge	P			
I003	Equipment/systems operations	P			
LS01	Local area survival (initial)	1	1	1	4
LS02	High threat combat survival (HTCST)	AR	AR	AR	5
LS03	Water Survival Training (WST)		1	1	
LS04	Aircrew chemical defense training (ACDE)	1	1	1	
LS06	Aircrew life support equipment (ALSE)	1	1	1	
LS08	Aircraft egress (Non Ejection)	1	1	1	4
LS011	Low threat combat survival training	AR	AR	AR	5
M001	Sortie	AR	AR	AR	
P280	ACDTQT	1	1	1	
P076	Emergency Procedures	P	P	P	
P360	Mission preparation, briefing and critique	P	P	P	
P366	Checklist procedures	P	P	P	
P367	Crew coordination	P	P	P	
P369	Aircraft equipment operation	P	P	P	
PP01	Flight physical	1	1	1	4
PP11	Physiological training (altitude chamber)	1	1	1	4
Q001	Open Book Exam	AR	AR	AR	
Q002	Closed Book Exam (EP)	AR	AR	AR	
Q003	Mission qualification evaluation	AR	AR		
Q004	Difference qualification evaluation			AR	
Q014	Difference certification			AR	
Q095	Flight publication check	P	P	P	
RR01	Flight records review	1	1	1	4
SS01	Combat survival course (S-V-80-A)	1			
SV83	Special survival training (S-V-83-A)	1		AR	
T001	Safety practices	P	P	P	

CODE	TRAINING EVENT	IMQT	RQT	DQT	NOTE
T003	Mission material/CTK procedures	P	P	P	
T004	Special equipment ops/procedures	P	P	P	
T006	Security procedures	P	P	P	
T018	Training documentation	P	P	P	
T019	Preflight/post-flight procedures	P	P	P	2
T042	LRU Location	P	P	P	3
T043	Signal flow	P	P	P	
T044	Test/signal routing	P	P	P	
T045	System operation	P	P	P	
T046	Isolate and correct malfunctions	P	P	P	
T047	Interpret subsystem operation	P	P	P	
T048	Perform under reduced capabilities	P	P	P	
WW01	Water survival course (S-V-90-A)	1			

NOTES:1. Include applicable manuals and operating instructions as directed by 67 IW.

2. RC-135 aircraft only.

3. Equipment location on-board the RC-135 that is maintained by the AMT.

4. Crewmember is grounded until completed.

5. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

9.8. Difference Qualification Training (DQT):

9.8.1. Difference Qualification Training (DQT) is used to qualify a qualified RC-135 crewmember in another series RC-135 aircraft (in same crew position only) or on a different system/baseline change within the same aircraft. DQT may not be used to qualify anyone in a different crew position. Units may conduct difference training and requalification training simultaneously. DQT is also used to certify crewmembers on new systems on the aircraft where an evaluation is not required. Document all training on appropriate forms and maintain record in the crewmembers training record.

9.8.1.1. The unit will examine the training and evaluation records of the individual and determine which training events are applicable from tables 9.1 or 9.2.

9.8.1.2. Complete all applicable ground and flight instruction involving any equipment, systems or crew procedures that differ from the RC-135 aircraft in which they are qualified.

9.8.1.3. Accomplish Q002, emergency procedures exam prior to first flight when emergency procedures are different from the RC-135 aircraft in which the individual is qualified.

9.8.1.4. Q004, difference evaluation may be required.

9.8.1.5. Q0014, difference certification, is the squadron commander's certification that all difference training is complete. Unit standardization and evaluation will document difference qualification in the individual's FEF. When individuals receive difference certification at other than home station, where the records are not available, the host unit will document and maintain difference certification in letter.

9.9. CONTINUATION TRAINING

9.9.1. General: This chapter outlines ground and flying training requirements for CMR, BMC, and BAQ aircrew members. All aircrew members must be qualified IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program.*

9.9.2. Ground Training. Aircrew members must attend required training to avoid grounding. Table 9.2 identifies BAQ and CMR continuation training requirements.

9.9.3. Failure to Complete Training Requirements.

9.9.3.1. Aircrew members who fail to complete BAQ identified ground training requirements are grounded and will not fly until the training is complete.

9.9.3.2. Aircrew members who fail to complete CMR identified continuation training events are downgraded to Non-CMR/Non-BMC and may not fly an operational sortie (local training or exercise sorties may be flown by Non-CMR/Non-BMC/BAQ aircrew members.)

9.9.4. Ground Training Events. Table 9.3 contains a list of all ground training events. Use the legend below to determine the purpose of each column. The frequency identifiers, (e.g. A, Q, C etc) are defined in Attachment 1 under "frequency."

9.9.4.1. CMR . The CMR assigned crewmembers must complete items marked with an X or CMR status will be lost.

9.9.4.2. GND . All aircrew members must complete items marked with an X or they will be grounded until accomplished.

9.9.4.3. CODE . A complete description of the event code is found in Attachment 2.

9.9.4.4. TRAINING EVENT . Name associated with code in Column 3.

9.9.4.5. IO . All intelligence operations must complete these items to remain current. Failure to accomplish could cause loss of currency.

9.9.4.6. AMT . All AMT crewmembers must complete these items to remain current. Failure to accomplish could cause loss of currency.

9.9.4.7. NOTE . See notes at the end of table for additional information.

Table 9.3. Continuation Ground Training Requirements.

CMR	GND	CODE	TRAINING EVENT	IO	AMT	NOTE
		G010	CBWD	A	A	
		G090	Anti-hijack	B	B	
		G100	Laws of armed conflict	B	B	
		G110	Protection from terrorism	A	A	
X		G120	ISOPREP Review	SA	SA	
X	X	G230	CRM refresher training	B	B	2
X		G280	Small arms training	B	B	
X		G630	Unit mission briefing	AR	AR	
X		G633	Special survival training refresher course	C*	C*	
X		LS02	High threat combat survival training (HTCST)	B	B	3
X		LS03	Water Survival Training (WST)	B	B	
X		LS04	ACDE	A	A	
		LS06	Aircrew life support equipment (ALSE)	A	A	
X	X	LS08	Egress (non ejection)	A	A	
X		LS011	Low threat combat survival training (LTCST)	B	B	3
X	X	PP01	Flight physical	A	A	
X	X	PP11	Physiological refresher	AR	AR	1
X		Q003	Mission qualification evaluation	C	C	
X		Q006	Closed book	SA	SA	
X		Q015	Special mission certification	AR	AR	
		RR01	Flight records review	A	A	

1. Physiological training changed to 5-year currency.

2. Waiver authority is the 67 IW/CC.

3. Crewmembers flying in high threat areas require LS02. Staff or crewmembers that do not fly in high threat areas require LS011. Determined by the OG/CC.

9.10. Currency.

9.10.1. AIA currency requirements.

9.10.1.1. 0-120 Days (Current) Individuals satisfy proficiency requirements by performing primary, instructor, or evaluator duties in their highest assigned duty position on a mission at least once every 120 days.

9.10.1.1.1. Multi-position qualified individuals satisfy currency requirements through duty accomplishment of their highest qualification IAW HQ 67 IWI and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*.

9.10.1.1.2. Multi-area qualified individuals must accomplish mission duties in each area of qualification at least every 120 days.

9.10.1.2. 121-180 Days (Non-Current). Individual must complete one operational mission with an instructor.

9.10.1.3. 181 Days or More (Q-3, Unqualified). Individual must complete requalification training IAW table 9.1 to include a qualification/mission evaluation.

9.11. Multiple Qualification/Currency:

9.11.1. Multiple qualification is authorized for AIA aircrew (AFI 11-202V2, *Aircrew Standardization/Evaluation Program* and HQ/AIA Supplement) and does not require a multiple qualification waiver.

9.11.2. To maintain multiple currencies, AIA personnel will fly at least once every 120 days on each platform or position currencies are held. Aircrew will comply with all other currency requirements for each aircraft.

9.11.3. Aircrew must complete difference/mission qualification training IAW tables 9.1 and 9.2.

Chapter 10

FLIGHT SURGEON GROUND AND FLIGHT TRAINING REQUIREMENTS

10.1. Flight Surgeon flying rates and requirements will be IAW AFI 11-202V1, *Aircrew Training* and this instruction. Tables 10.1 and 10.2 list all initial and continuation flight and ground training requirements.

Table 10.1. Initial and Continuation Ground Training Requirements.

GND	CODE	TRAINING EVENT	FREQ	NOTE
	G010	CBWD	A	
	G090	Anti-hijack	B	
	G100	Laws of armed conflict	A	
	G110	Protection from terrorism	A	3
	G120	ISOPREP review	SA	
	G231	Initial CRM	1	1
	G633	Special survival training refresher course	C*	3
X	LS01	Local area survival (initial)	1	1
	LS02	High threat combat survival training (HTCST)	B	3
	LS03	Water survival training (WST)	B	3
	LS06	Aircrew life support equipment (ALSE)	1/60	2
X	LS08	Egress training, non ejection	1/60	2
	LS011	Low threat combat survival training (LTCST)	B	3
X	PP01	Flight physical	A	
X	PP11	Physiological refresher	AR	
X	Q002	Closed book exam	A	
X	RR01	Flight records review	A	
	SS01	Combat survival training (S-V-80-A)	1	1
	SV83	Special survival training (S-V-83-A)	AR	
	WW01	Water survival training (S-V-90-A)	1	1

1. Initial qualification requirement only.

2. Waiver authority (1/180 days) is the unit LSO.

3. Flight surgeons flying in high threat areas require LS02. Flight surgeons that do not fly in high threat areas require LS011. Determined by the OG/CC.

Table 10.2. Initial and Continuation Flight Training Requirements.

CODE	TRAINING EVENT	FREQ	NOTE
M001	Sortie	1/60	1,2,3,4
M002	Night sortie	1/180	5,6
P280	ACDTQT	A	

1. MAJCOM establishes procedures for flight surgeons to regain flying currency.

2. Only 1 sortie is creditable per single calendar day

3. Required 12 sorties annually.

4. Flights on non-primary assigned aircraft-limited to 6 flights annually, 3 flights semiannually.

5. Required 2 night sorties annually. The flight must have at least one 1 hour of flight time during the hours of darkness. FS may only log 1 night sortie on non-primary assigned aircraft annually.

6. Dual-log with M001.

Chapter 11

-135 AIRCREW TRAINING SYSTEMS USER'S GUIDE

11.1. General. This chapter establishes the concept of contractor-provided training, identifies responsibilities, and provides guidelines to be used in conducting and managing effective qualification and recurring -135 academic and ATD training programs.

11.2. General Information. The Aircrew Training System (ATS) is a civilian contractor-provided service. The ATS contractor provides academic and training device instruction at the formal school and at each ATS site. Air Force instructors and evaluators conduct flight training and administer all evaluations. The ATS contractor guarantees students trained to meet government standards.

11.2.1. The guidance in this chapter is extracted from the ATS contract, quality assurance directives, and contractor provided courseware procedures.

11.2.2. Ensure scenarios are based on expected employment tasking and training device capabilities. Emphasis events that are not readily attainable during daily flying activities.

11.2.3. Simulator Certification (SIMCERT) will be done by 338 CTS. The 338 CTS will certify the ATD to command standards before crediting transfer of task learning from the ATD to the aircrew. Events certified as code 1 through SIMCERT may be used to complete selected annual RAP and non-RAP event requirements.

11.3. Lesson Objectives. The contractor-developed lesson objectives are based upon requirements outlined in this instruction. Make changes using the aircrew critique program.

11.4. Government and Contractor Interface:

11.4.1. Aircrew Training. The ATS contractor will provide 135 crew members with ground-based training required to meet objectives for initial qualification, requalification, upgrade, senior staff, difference and continuation training.

11.4.2. Unsatisfactory Trainee Progress: The ATS contractor will provide feedback to the 338 CTS/DO for trainees displaying substandard performance, lack of preparation or participation, or poor attitude during any ATS contractor-conducted training. The 338 CTS will review the trainee's record and determine whether to continue, modify, or terminate training upon receiving documentation and recommendations from the ATS contractor.

11.4.3. Aircrew Evaluation:

11.4.3.1. General. The decision of the Air Force evaluator as to the ability of a crew member to meet qualification levels as set forth in AFI 11-202V2, *Aircrew Standardization/Evaluation Program* and AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*, shall be final and will not be subject to question by the contractor.

11.4.3.2. Initial Qualification Evaluations. In the event of an unqualified rating (ATD or in-flight), the contractor is responsible for all retraining (ground based) in those phases/sub-phases determined to be under the direct control of the contractor. A joint contractor/Air Force review board will review the crewmember's performance and determine those phases of the ground-based courses that require additional training to meet qualification levels.

11.4.3.3. Recurring Evaluations. In the event of an evaluation failure (in-flight or ATD), the appropriate ATD should be used to the maximum extent possible for retraining and rechecks. In all cases, the unit must coordinate with the ATS contractor for ATD/instructor availability. It may be necessary to cancel or reschedule training to accomplish the desired corrective actions.

11.4.4. Responsibilities:

11.4.4.1. ATS Contractor: Each ATS site will provide academic/ATD training for -135 aircrew initial qualification, requalification, upgrade, senior staff, difference and continuation training programs to meet course objectives.

11.4.4.2. Det. 10, ACC TRSS:

11.4.4.2.1. Ensure instruction is of the highest quality through the review of crewmember critiques, evaluator feedback, CCTS feedback, and their own evaluations.

11.4.4.2.2. Review/Evaluate the task analysis, objective hierarchy, and contractor courses/ training materials for accuracy, currency, and effectiveness.

11.4.4.2.3. Develop and coordinate Air Force training requirements with the contractor to ensure effective utilization of all contractor-provided academic and ATD training.

11.4.4.2.4. In their capacity as RC/OC/WC-135 curriculum development experts, they will develop and/or oversee development of Air Force administered training (i.e., training courses, syllabi etc.) as well as act as contract training liaison/Quality Assurance Evaluations (QAEs).

11.4.4.3. Wing/Group:

11.4.4.3.1. Provide constructive reports and inputs concerning the RC/OC/WC/TC-135 training programs as specified in chapter 1 of this publication.

11.4.4.3.2. Provide assistance and support with subject matter expertise (SME) when requested by HQ ACC/XOFR; Det. 10, ACC TRSS or 338 CTS.

11.4.4.3.3. Review the ETCA and adhere to guidance and procedures concerning requesting, allocating, sub allocating and confirming attendance at scheduled formal training courses. Close coordination with the formal school quota manager and HQ ACC/XOFR is imperative to ensure effective utilization of training slots and contractor resources.

11.5. ATS Formal Course Prerequisites. Each ATS course is designed and based on certain prerequisites being met by the trainee prior to course entry. In order for the ATS contractor to guarantee a trainee is trained to meet government standards and will satisfactorily complete flight training and evaluations, all prerequisites must be complied with unless waived by the appropriate agency in accordance with the guidance in chapter 1.

11.6. Recurring Academic/ATD Training:

11.6.1. General. Recurring academic/ATD training is designed to ensure that prescribed subject material is presented in a realistic manner on a programmed basis. Instruction will be provided by instructors trained and employed by the ATS contractor and through course materials developed by the training contractor.

11.6.2. Objective. Ensure all aircrews maintain the proficiency required to safely operate the aircraft and effectively perform the assigned mission. Crew members will utilize the training devices to enhance the training areas that the ATDs are particularity well suited to accomplish (e.g., windshear/ microburst training, low visibility approaches, systems knowledge, emergency/abnormal procedures, degraded navigation systems, etc.).

11.7. Responsibilities:

11.7.1. The ATS contractor will:

11.7.1.1. Ensure the OFT/CTD along with other devices and training aids enhance flight training programs. The instructor will conduct scheduled lessons and mission overviews prior to each training device lesson. All necessary data to complete the training device mission or assigned task will be provided during the pre-mission period.

11.7.1.2. Ensure their instructors provide an environment for the simulator training that is as realistic as possible. Attention will be directed to crew coordination throughout all phases of flight. Crews will utilize equipment in the trainer the same as in flight. This shall include communications, personal, and emergency equipment. Correct communications phraseology, techniques, checklist usage/regimentation, and instrument/flight/air refueling procedures will be stressed at all times. Realistic aircraft systems and navigation aid failures/malfunctions will be included in a logical and timely manner.

11.7.1.3. Ensure their instructors conduct a post lesson critique to reinforce the desired learning outcomes.

11.7.1.4. Ensure their instructors provide comments on the recurring training documentation. The intent of these comments is to provide meaningful feedback to the appropriate levels of supervision (Air Force and contractor) on the student's continuation training. In those rare cases where the student requires more training than the time available, exhibits less than required preparation, or displays an attitude problem, the instructor must provide immediate documentation/feedback to the student's unit through appropriate channels.

11.7.1.5. Ensure their instructors provide all students with a training critique.

11.7.2. 338 CTS will review all continuation training courses and mission scenarios. Changes should be made as necessary whenever aircraft systems, operating procedures, or mission/command training requirements are modified/changed.

11.8. OFT Profile Overview:

11.8.1. Self-Study. The crewmember is responsible for adequate preparation prior to reporting for each training device mission. This includes a review of the mission profile(s), pre-course study material, all associated normal, abnormal, and emergency procedures, and applicable aircraft systems. Each pilot must review the applicable portions of the flight publications and provide answers to review exercises located in the OFT profile.

11.8.2. Pre-mission. The instructor will conduct a pre-mission briefing before each OFT that covers the following: mission overview, academic session and systems video tapes, aircraft loading, performance data, route of flight, communications, takeoff weather, simulator discrepancies, and OFT emergency egress. The instructor will brief the crew member(s) on mission objectives, specific training

items to be accomplished, scheduled systems/performance training, CRM, and any additional area of emphasis. The briefing should include data and information necessary to complete the mission, special procedures, and aircraft systems. The information presented in the briefing should correlate to the tasks to be reinforced in the training device. It should include any changes or adjustments to pre-positioned data and a review of the overall mission and coordination of individual crew member's responsibilities.

11.8.3. Mission. Fly the sortie in accordance with the applicable profile. It is imperative that the pilot team cope with emergencies while continuing to fly the aircraft. Freeze the OFT only when necessary to complete training objectives.

11.8.4. Post-mission. The instructor will critique the crew's performance in all phases of the mission. Complete applicable post-mission documentation and AFORMS products. Requests or recommendations for additional training will be forwarded to the unit training manager for action. Additional training times must be coordinated with the unit training manager and the ATS contractor. Additional training will be accomplished as soon as possible, schedule permitting, but not later than the next scheduled simulator session. Individuals will not be considered refresher complete with the refresher simulator requirement until all additional training is completed.

11.9. RC/OC/WC/TC-135 ATS Syllabi:

11.9.1. The ATS syllabi describe the RC/OC/WC/TC-135 training program conducted at the formal school and the ATS sites. The syllabi supplement applicable DOD, HQ USAF, ACC, and 12 AF directives pertaining to the content and administration of aircrew flying training courses. The syllabi act as blueprints for the various -135 ATS courses and programs and provide units a description of the training the crewmembers receive from the contractor.

11.9.2. The ATS contractor produces the syllabi and is responsible for curriculum development as described in the RC/OC/WC/TC-135 ATS Statement of Work (SOW) and System Specification (SPEC). The contractor will review the syllabi annually and update as required.

11.10. Scheduling:

11.10.1. Annual throughput for specific ATS courses is established in the ATS contract. The programmed flying training (PFT) document reflects the planned annual formal school throughput based on Air Force requirements, formal school and ATD capacities, and contract authorizations.

11.10.2. Cancellation of ATS formal school course quotas. According to the ETCA, HQ ACC/XOF must be notified 45 days prior to class start date if a quota cancellation or no-fill is pending. All formal school quota cancellations must be made no later than 30 days prior to class start date to enable the quota to be reallocated.

11.10.3. Local procedures will be developed at Offutt AFB for scheduling ATS courses. The unit training manager is responsible for procedures that minimize schedule changes and maximize training in the available time. The ATS contractor should be kept apprised of scheduling changes and special training requirements.

11.11. Administration. Units requesting ATS courseware or syllabi should submit their requests to Det. 10, ACC TRSS.

11.12. Courseware Changes. Submit courseware changes via the course critique system or by contacting Det. 10, ACC TRSS.

MARVIN R. ESMOND, Lt General, USAF
DCS, Air and Space Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Title 37, *United States Code Section*, 301a

E.O. 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, November 22, 1943

Public Law 92-204 *DoD Appropriations Act*, 1972, December 18, 1971

Public Law 93-570 *Continuing Appropriations,* 1975, February 28, 1975

Public Law 93-294 *Aviation Career Incentive Act of 1974*, May 31, 1974

DOD FLIP, *General Planning*

DOD 4500.54-G, *Foreign Clearance Guide*

FAA Handbook 7610.4H, *Special Military Operations*

AFI 10-207, *Command and Control*

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

AFPD 11-3, *Life Support*

AFI 11-202V1, *Aircrew Training*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-202V3, *General Flight Rules*

AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria*

AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*

AFMAN 11-210, *Instrument Refresher Course (IRC) Program*

AFMAN 11-217V1, *Instrument Flight Procedures*

AFMAN 11-217V2, *Instrument Flight Procedures*

AFI 11-218, *Aircraft Operation and Movement on the Ground*

AFI 11-220, *Reconnaissance Flight Rules and Procedures*

AFI 11-290, *Cockpit/Crew Resource Management Training Program*

AFI 11-301, *Aircrew Life Support (ALS) Program*

ACCI 11-301, *Aircrew Life Support Program*

AFI 11-401, *Flight Management*

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*

ACCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs*

AFI 13-207, *Preventing and Resisting Aircraft Piracy (High-jacking)*

AFI 14-105, *Unit Intelligence Mission and Responsibilities*

AFI 31-207, *Arming and Use of Force by Air Force Personnel*

AFI 31-210, *The Air Force Antiterrorist Protection (AT/FP) Program Standards*

AFPD 32-40, *Disaster Preparedness*

AFI 32-4001, *Disaster Training Preparedness and Planning*

AFI 32-4002, *Hazardous Material Emergency Planning and Response Program*

ACCI 33-151, *Combat Crew Communications Support Requirements*

AFI 33-211, *Communication Security (COMSEC) User Requirements*

AFI 36-2107, *Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC)*

AFI 36-2226, *Combat Arms Training and Maintenance (CATM) Program*

AFMAN 37-139, *Records Disposition Schedule*

AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*

AFI 91-202, *The US Air Force Mishap Prevention Program*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention and Health (AFOSH) Program*

Abbreviations and Acronyms

A—Annual

AC—Aircraft Commander

ACC—Air Combat Command

A/C—Air Conditioning

ACDTQT—Aircrew Chemical Defense Task Qualification Training

AFFSA—Air Force Flight Standards Agency

AFH—Air Force Handbook

AFI—Air Force Instruction

AFJH—Air Force Joint Handbook

AFM—Air Force Manual

AFORMS—Air Force Operations Resource Management System

AIFC—Advanced Instrument Flight Center

AOR—Area of Responsibility

API —Aircrew Position Indicator

APU—Auxiliary Power Unit

AQP—Airport Qualification Program

AR—As Required

A/R—Air Refueling

ARDA—Airborne Radar Directed Approach

ARTCC—Air Route Traffic Control Center

ATD—Aircrew Trainer Device

ATOC—Air Terminal Operations Center

ATS—Aircrew Training System

ATSO—Ability to Survive and Operate

B —Biannual

BAI —Back-up Aircraft Inventory

BMC—Basic Mission Capable

BAQ—Basic Qualified

C—Cyclical

C*—Cyclical

CAF—Combat Air Forces

CBT—Computer Based Training

CBWD—Chemical-Biological Warfare Defense

CC—Command and Control Procedures

CCRW—Command Curriculum Review Workshop

CCTS—Combat Crew Training School

CFIC—Central Flight Instructor Course

CFT—Cockpit Familiarization Trainer

CMR—Combat Mission Ready

COMSEC—Communications Security

CONUS—Continental United States

CP—Copilot

CRM—Crew Resource Management

CSD—Course Summary Document

CST—Combat Survival Training

CT—Continuation Training

CTA—Chemical Threat Area

CTD—Celestial Training Device

CUR—Currency

DNIA—Duties Not Including Alert

DNIF—Duty Not Including Flying

DOC—Designed Operational Capability

DQT—Difference Qualification Training

DR—Dead Reckoning

EAM—Emergency Action Message

ECM—Electronic Countermeasures

EFTOC—Engine Failure, Takeoff Continued

EMCON—Emission Control

EN—Evaluator Navigator

EP—Evaluator Pilot

ERCC—Engine Running Crew Change

ERD—Evaluation Reference Date

ESD—Evaluator Standards Document

ETCA—Education and Training Course Announcement

EWO—Electronic Warfare Officer

F—Familiarization

FC—Basic Qualified Copilot

FEF—Flight Evaluation Folder

FIDC—Flight Instructor Development Course

FLIP—Flight Information Publications

FN —Basic Qualified Navigator

FP —Basic Qualified AC

FTC—Faculty Training Course

FTU—Formal Training Unit

GA—Go-around

HARM—High-Speed Antiradiation Missiles

HHQ—Higher Headquarters

HOSM—Host Operations Systems Management

HQ—Headquarters

HVAA—High Value Airborne Asset

IAW —In Accordance With

ICAO—International Civil Aviation Organization

IDM—Improved Data Modem

IFF/SIF—Identification Friend or Foe/Selected Identification Features

IFR—Instrument Flight Rules

ILS —Instrument Landing System

IMT—In-flight Maintenance Technician

IMTI —In-flight Maintenance Technician Instructor

IN —Instructor Navigator or Intelligence Officer/Branch

INUP—Instructor Navigator Upgrade Training

IP—Instructor Pilot

IPUP—Instructor Pilot Upgrade Training

IQT—Initial Qualification Training

IR—Infrared

IRC—Instrument Refresher Course

IRUP—Instructor Raven Upgrade Training

ISD—Instructional Systems Development

ISOPREP—Isolated Personnel Report

ISS—Instrument Simulator Sortie

LMA—Lowest Measurable Aptitude

LOP—Line of Position

LSE—Life Support Equipment

MAJCOM—Major Command

MC—Mission Copilot

MCI—Multi-Command Instruction

MDS—Mission Design Series (i.e., RC-135S, EC-135C, OC-135, etc.)

MEP—Maintenance Event Period

MN—Mission Navigator

MOB—Main Operating Base

MOST—Mission-Oriented Simulator Training

MP—Mission Pilot (NA copilots or first pilots)

MPP—Most Probable Position

MQF—Master Question File

MQT—Mission Qualification Training

MWS—Major Weapon System

NAF—Numbered Air Force

N-BMC—Non Basic Mission Capable

NC—Non Current

N-CMR—Non-Combat Mission Ready

NUP—Navigator Upgrade Program

OCONUS—Outside the continental United States

OFT—Operational Flight Trainer

OG—Operations Group

OG/CC—Operations Group Commander

ONP—Over-water Navigation Procedures

OPORD—Operations Order

OPR—Office of Primary Responsibility

OPT—Optional

P—Proficient

PAA—Primary Assigned Aircraft

PAI—Primary Aircraft Inventory

PAR—Precision Approach Radar

PDL—Pilot Director Lights

PDO—Publications Distribution Office

PFT—Programmed Flying Training

PTT—Part Task Trainer

PUP—Pilot Upgrade Program

Q—Quarterly

RAP—Ready Aircrew Program

RQT—Requalification Training

SA—Semiannual

SATCOM—Satellite Communications

SEFE—Standardization/Evaluation Flight Examiner

SIOP—Single Integrated Operations Plan

SMT—Sensor Maintenance Technician

SOSM—Squadron Operations System Management

SORTS—Status of Resources and Training System

SS—Single-ship

STAN/EVAL—Standardization and Evaluation

SIDS—Standard Instrument Departures

STARS—Standard Arrival Routes

TC—Tactical Coordinator

TDY—Temporary Duty

TERPS—Terminal Instrument Procedures

TG—Training Guide

TMS—Training Management System

T/O—Take-off

T.O.—Technical Order

TOG—Time On Ground

TOLD—Takeoff and Landing Data

TRP—Training Review Panel

TTF—Tanker Task Force

UC—Unqualified Copilot

UGT—Upgrade Training

UMD—Unit Manning Document

UN—Unqualified Navigator

UP—Unqualified AC

UQ—Unqualified

VFR—Visual Flight Rules

WG—Wing

WST—Water Survival Training

Terms

Academic Training—A course of instruction including, but not limited to, classroom instruction or programmed study related to aircraft systems and operation, flight characteristics and techniques, performance, normal procedures and abnormal and emergency procedures. To adequately prepare students, academic courses should be completed prior to simulator/flight training. Part-task training utilizing ATDs may be included in academic training modules.

Aircraft Commander (AC)—Pilot who has been certified to perform "pilot-in-command" duties.

Aircraft Systems Refresher—Aircraft and crew position unique systems refresher courses.

Aircrew Training Device—Includes operational flight trainer (OFT), celestial training device (CTD), table top navigation and rendezvous trainer) and other flight simulators or part-task trainers

Aircrew Training System (ATS)—Integrated qualification, upgrade, and continuation training program for crewmembers. Civilian contractors conduct most formal academic and ATD training: Air Force conducts all flight training.

Air Refueling (A/R) Mission—Flight that involves A/R procedures as receiver.

Basic Qualified (BAQ)—Aircrew member who has successfully completed initial qualification training and has passed an in-flight evaluation, but is not mission qualified in an assigned aircraft.

Cockpit/Crew Resource Management (CRM) Training—Training to improve the teamwork, dynamics, and effectiveness of aircrews.

COMSEC Aid—COMSEC material, other than equipment or devices, that assists in securing communications and which is required in the production, operation, or maintenance of COMSEC systems and their components. Examples are keys, codes, and authentication information in physical or electronic form, call signs, frequencies, and supporting documents.

COMSEC Responsible Officer (CRO)—Individual appointed by a unit commander to oversee the unit's COMSEC program as outlined in AFI 33-211, *Communication Security (COMSEC) User Requirements*.

Computer-Based Training (CBT)—Ground training system that uses computer-generated graphics or text in conjunction with interactive programs as the primary medium of instruction.

Continuation Training—Ground, flight, and ATD training events designed to maintain proficiency and improve crewmember capabilities.

Copilot (C)—Pilot qualified to perform duties in the right seat only.

Critical Phases of Flight—Take-off, air refueling, approach to landing, landing, flight maneuvers that require direct instructor supervision, and designated formal training unit (FTU), CCTS or CFIC only maneuvers. Approaches to planned missed approaches and air refueling rendezvous are not considered critical phases of flight.

Currency Event—Flying and ground continuation training events with prescribed maximum interval-between-accomplishment shown in the "FREQ" column.

Difference Qualification Training (DQT)—Training necessary to qualify an individual in a different tactic or system within the same aircraft, or an aircrew member in an aircraft that is a different series other than the one in which currently qualified. Training is conducted IAW approved syllabi or as directed in this instruction.

Education and Training Course Announcement (ETCA)—ETCAs are the Air Force approved formal training courses, formerly the AFCAT 36-2223, and are maintained at Keesler AFB. Copies of these courses may be accessed at http://HQ2AF.KEESLER.AF.MIL/ETCA.HTM.

Event or Task—A training item to be accomplished. Several events/tasks constitute a training profile.

Electronic Warfare Officer (EWO)—An individual qualified to perform EWO duties.

Familiarization Item—An item completed by demonstration, observation, or in-seat experience. Proficiency is not required.

Flight Examiner/Evaluator—A crewmember designated to administer evaluations.

Frequency—See below:

A--Annual—Accomplished every 12 months. Initial accomplishment establishes a currency reference month. Recurring accomplishment should be completed during the 6 months preceding the next currency reference month. Events due and completed ensure currency through the end of the currency reference month of the following year. For example, if an individual's currency reference month is January 01 and he/she completes the event in July 00, the currency reference month is updated to Jan 02. Units may change an individual's currency reference month to facilitate block ground training. In no case will an individual exceed 18 months between accomplishment of annual ground training events.

AR--As Required—(Self explanatory).

B--Biennial—Accomplished every 24 months. Initial accomplishment establishes a currency reference month. Recurring accomplishment should be completed during the 6 months preceding the next currency reference month. Events due and completed ensure currency through the end of the currency reference month of the second year. Units may change an individual's currency reference month to facilitate block ground training. In no case will an individual exceed 30 months between accomplishment of biennial ground training events.

C--Cycle—The 17-month cycle based on in-flight evaluation completion date. IRC, open and closed book testing, and in-flight evaluations are required 17 months after previous in-flight evaluation. Period to complete training, testing, and evaluation is the 6 months preceding the qualification evaluation expiration date. See AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and appropriate MAJCOM supplement.

C*—Accomplished every 18 months.

M--Monthly—Accomplished each calendar month.

Q--Quarterly—Accomplished four times each training period, once in each three-month period (Oct-Dec, Jan-Mar, Apr-Jun, and Jul-Sep).

SA--Semiannual—Accomplished twice each training period, not later than the end of the 6^{th} month from the month last accomplished.

T--Triennial—Accomplished every 36 months. Initial accomplishment establishes a currency reference month. Recurring accomplishment should be completed during the 6 months preceding the next currency reference month. Events due and completed ensure currency through the end of the currency reference month of the third year. Units may change an individual's currency reference month to facilitate block ground training. In no case will an individual exceed 42 months between accomplishment of triennial ground training events.

In-flight Maintenance Technician (IMT)—The generic term for OC-135 Sensor Maintenance Technician, RC-135S ELINT and Photo Technician, and RC-135U/V/W In-flight Maintenance Technician positions. IMT requirements apply to all IMT positions unless otherwise indicated.

Initial Qualification Training—Prepares aircrew members to perform non-tactical duties in the aircraft.

Training is conducted IAW approved syllabi.

Instructor—Crewmember trained, qualified, and certified by the squadron commander as an instructor to perform both ground and in-flight training.

Instructor Candidate—An aircrew member undergoing upgrade training to instructor.

Instructor Supervision—A qualified instructor of like specialty supervising a maneuver or training event. For critical phases of flight, the instructor pilot must occupy one of the seats/stations, with immediate access to the controls.

Instrument Simulator Sortie—Simulator training focusing primarily on instrument and checklist procedures.

Minimum Requirements—The minimum training level to keep a crewmember in CMR/BMC status.

Mission-oriented simulator training (MOST)—Part of a training that includes a practical application, full-mission scenario in the simulator or weapons system trainer.

Mission Qualification Training (MQT)—Training required to qualify an individual in the designated mission of the unit. MQT includes IMQT, RQT, DQT and SSQT. See chapter 2 for more information.

Navigator (N)—Crewmember fully qualified in navigator duties.

Night—See flight information publications (FLIP) for definition.

Non-Combat Mission Ready (N-CMR)—Individual who is unqualified in the aircraft, incomplete in required continuation training, or not certified to perform the unit mission(s).

Part Task Trainer (PTT)—A device used to practice a specific task such as cargo door operation or receiver air refueling.

Pre-deployment Simulator—Training in an ATD to familiarize crew members with the mission profiles and other aspects of the missions they will encounter while deployed outside of the CONUS.

Primary instructor—Individual designated in writing or individual who conducts more than 50% of a students flight training.

Proficient—Capable of meeting the 3.0 training standard for a particular event.

RAP Sortie—A sortie (operational or training) that contains tasks and/or events applicable to the specific mission of the unit or aircraft. Squadron commanders will submit RAP training profiles for training sorties to the 55 OG/CC for approval. Update RAP training profiles annually. Send a courtesy copy to HQ ACC/XOFR. See individual crewmember specific chapters for more details.

Raven—An EWO crewmember qualified to operate specialized electronic warfare equipment onboard the RC-135 aircraft.

Refresher Simulator—Simulator training emphasizing aircraft systems, normal and emergency procedures, and mission-specific training requirements.

Requalification Training—Training required to qualify aircrew members in an aircraft in which they have been previously qualified. See chapter 2 for requalification training requirements.

Sensor Maintenance Technician (SMT)—An in-flight maintenance technician qualified to perform sensor maintenance on the OC-135 aircraft.

Simulated Engine Failure Take-off Continued (EFTOC)—Practice procedure simulating engine failure after a take-off or touch-and-go. Follow aircraft specific procedures in AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*, and aircraft tech orders.

Supervised Training Status—Crewmember will fly under instructor supervision as designated by the squadron commander or evaluator.

Training Devices—All trainers, computer assisted instruction, sound-on-slide programs, videos, and mockups designed to prepare students for flight training or augment prescribed continuation training

Attachment 2

TRAINING EVENT DESCRIPTION

"A" Events:

A001--Initial Qualification Academic Course. Course designed for aircrew members engaged in training needed to qualify for aircrew duties in an assigned position for a specific aircraft. Credit will not be awarded until all course requirements are satisfied. This course will be provided IAW the 338 CTS, HQ AIA, 67 IW, or in-unit training syllabus as applicable.

A002--PUP Academic Course.

A004--Senior Staff Academic Course.

A010--Instructor Academic Course. Accomplished IAW the CFIC or In-Unit Training Syllabus as applicable.

A015--TC Academics. Academic course for upgrading EWOs to Tactical Coordinator on RC-135S/U.

A017--Regulation and Directive Knowledge. For front end and mission crew members, a knowledge of AFI's, MAJCOM supplements, wing manuals and operating procedures, as determined by the 338 CTS or 67 IW. Includes instruction on what publications and directives apply to which crew position and the particular application of each. The proper care and use of publications and directives will be addressed.

A020--Improved Data Modem (IDM) Academics. The following topics will be included: high-speed antiradiation missiles (HARM) capabilities and limitations, HARM Targeting System capabilities and limitations, UHF 9 radio set-up, IDM equipment set-up, and F-16 CJ/RJ IDM CONOPS.

A027--Initial Recon/Ops Study (RC-135). Recurring ops study and certification is required. This is a non-grounding event however failure to accomplish the event does affect CMR status (N/A BMC). CMR crewmembers may log A027 for all deployment certifications if they are primary crewmembers for the deployment. Any CMR instructors/crewmembers giving deployment training to a qualified crewmember will receive credit. BMC crewmembers may log A027 after completing ops study for all FOLs and attending an operational certification for any FOL.

A029--Difference Academic Course. Designed to qualify crewmembers in a different mission/series aircraft. Administered when a specific course series course is not designated.

A034--Requalification Academic Course. Used as an abbreviated academic course during requalification for aircrew members.

A037--EWO Performance Training. Thorough review of EWO performance data computations.

A044--CFIC Pre-attendance Workbook. A workbook exercise designed for crewmembers beginning instructor upgrade training to be completed prior to attending MAJCOM or in-unit academic instructor course A010.

A052--Receiver Air Refueling Indoctrination. Familiarization training consisting of air refueling missions in the air refueling part task trainer, OFT or instructor pre-brief.

"E" Events:

E051--Data Run Procedures. A planned activity period for reconnaissance compartment training that stresses equipment operation during event collection. Instructors may dual-log this event.

E052--Electronic Warfare Activity Period (EWAP). Requires a minimum of scheduled 2 ½ hours from takeoff to "Off Watch" with at least 90 minutes of "On Watch" time. The raven crew must accomplish signal processing to include signal detection, ID, location, recording and reporting. The tactical coordinator is the final authority for ensuring accomplishment of crew requirements. This time may be shortened to account for a late take-off or other mission changes. The tactical coordinator will determine if sufficient time was allowed to complete the E052. A minimum of 1 1/2 hours is required to log an E052. This should include simulated scenarios and conducted in conjunction with the N050 for RC-135U/V/W. Instructors may dual-log this event.

E053--UHF frequency division multiplexing (FDM) Operations. Crewmember will demonstrate proficiency with UHF air-to-air and air-to-ground operations.

E054--IDM Integration. One complete mission planning and one flight including the following requirements: UHF 9 set-up, IDM Link Processor set-up and placing signals on the IDM Link.

"G" Events:

G001--Flying Safety Training. Conducted quarterly by the wing/group flying safety office IAW AFI 91-202, *The US Air Force Mishap Prevention Program*. Commanders or appropriate ops supervisors will ensure that any aircrew member not attending the training will read and sign-off the training notes. This is a non-grounding event and failure to accomplish the event does not affect CMR/BMC status.

G002--Supervisor Safety Training. Conduct training IAW AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention and Health (AFOSH) Program.* Event is required during initial qualification training. This is a non-grounding event and failure to accomplish the event does not affect CMR/BMC status.

G003--Flight Line Security and Driver's Examination. Training and certification of aircrew members to drive on the flight line.

G005--Aircraft Marshaling Training and Examination. Review of AFI 11-218, *Aircraft Operation and Movement on the Ground*. Required for initial and after PCS. This is a non-grounding event and failure to accomplish the event does not affect CMR/BMC status.

G006--US/Russia Prevention of Dangerous Military Activities. Initial, annual refresher, and pre-deployment training for the Prevention of Dangerous Military Activities will be conducted to ensure that all aircrew are familiar with the agreement and the implementing provisions contained in the CJCSI 2311.01. Training requires a review of the "Procedures for the Prevention of Dangerous Military Activities Between the US and Russia" section of the Flight Information Handbook. Crewmembers must have this training during qualification training, annually or during pre-deployment briefings for applicable theaters.

G010--Chemical-Biological Warfare Defense Training (CBWD). Ground chemical defense ensemble training. Annual requirement IAW AFPD 32-40, *Disaster Preparedness*, AFI 32-4001, *Disaster Preparedness Planning and Operations*, and AFI 32-4002, *Hazardous Material Planning and Response Program*. This is a non-grounding event and failure to accomplish the event does not affect CMR/BMC status.

G011--Cockpit procedural trainer. Training to familiarize students with checklists, normal, and emergency procedures in the aircraft.

G025--Aircraft Field Trip. Trip will include familiarization of door and hatch operation and the location of life support equipment and other emergency equipment including the location of all oxygen filler ports. Other items will be determined by the 338 CTS or 67 IW.

G030--SIOP Command and Control Procedures. Message decoding and operational reporting procedures training. This is a non-grounding event however, failure to accomplish the event does affect CMR status (N/A BMC).

G031--Initial SIOP Command and Control Procedures Training.

G033--Alert Procedures. Review of local and forward operating locations (FOL) alert procedures for specific RC-135 missions.

G035--PLZT Goggles Exercise.

G036--Flash Blindness/Thermal Protection Training.

G040--SIOP Study. Review of SIOP mission documents. This is a non-grounding event however failure to accomplish the event does affect CMR status (N/A BMC).

G060--Tactics. Tactics doctrine and training necessary to complete unit's operational mission. This training will include a review of threats to the aircraft, crew coordination, and defensive maneuvers. For initial students this course is will be expanded to allow in-depth understanding of units mission.

G070--Aircrew Intelligence. The intelligence training program will be closely aligned with the unit's weapons and tactics program. The focus and extent of academic training will be determined by the OG/CC and will be aligned with projected wartime tasking, threats, and unit equipage (AFI 14-105, *Unit Intelligence Mission and Responsibilities*). This is a non-grounding event but failure to accomplish the event does affect CMR/BMC status. In addition to threat knowledge, aircrew training will include:

Escape and Recovery (E&R). E&R training will prepare aircrew for the possibility of evasion, captivity, and escape in hostile territory.

Collection and Reporting (C&R). C&R training will enable aircrew to initiate aircrew-originated reports (In-flight Report (INFLTREP), Communication Instructions Reporting Vital Intelligence Sighting (CIRVIS), etc.), and will familiarize them with the information requirements of the intelligence-generated Mission Report (MISREP) and Intelligence Report (INTREP).

Current Intelligence. Current intelligence is required and will cover significant military/political developments (including threat updates) in the squadron's mission areas of interest.

G080--Communications Procedures. Training to include: Air Force spectrum interference reports (AFSIR), authentication and IFF/SIF codes and procedures, electronic warfare, L-BAND SATCOM, Have Quick and Secure Voice. Training will also include COMSEC user requirements to include receiving, protecting, destroying, and accounting for COMSEC material. Units will establish a communications training program to satisfy CT requirements. Training is required in each training cycle IAW ACCI 33-151, *Combat Crew Communications Support Requirements*; AFI 33-211, *Communication Security (COMSEC) User Requirements*, and AFI 10-207ACC1, *Command and Control*. This is a non-grounding event and failure to accomplish the event does affect CMR/BMC status.

G090--Anti-Hijack. Training on USAF policy and guidance on preventing and resisting aircraft piracy. (AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking*).

G100--Laws of Armed Conflict. Principles of the Geneva Convention. IAW AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*.

G110--Protection from Terrorism. Aircrew training for hostage or terrorist situations. (*AFI 31-210, The Air Force Antiterrorist Protection (AT/FP) Program Standards*).

G119--ISOPREP. Initial isolated personnel report (ISOPREP) card. See AFI 14-105, *Unit Intelligence Mission and Responsibilities* for more information. This is a non-grounding event but failure to accomplish the event does affect CMR/BMC status.

G120--ISOPREP Review. Semiannual review of isolated personnel report according to AFI 14-105, *Unit Intelligence Mission and Responsibilities*. The purpose is to generate (if necessary), review, and ensure accuracy of aircrew isolated personnel reports. This is a non-grounding event but failure to accomplish does affect CMR/BMC status.

G130--Instrument Refresher Course. Instrument flying procedures for pilots. IAW AFMAN 11-210, *Instrument Refresher Course (IRC) Program*; and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, as supplemented. Includes the IRC exam.

G160--Over-water Navigation Procedures. Procedures and techniques of over-water navigation.

G161--Polar Navigation Procedures. Procedures and techniques of polar navigation.

G170--Celestial Training Device (CTD). Encompasses any celestial navigation procedures training accomplished in the CTD with a minimum duration of one hour.

G171--Polar Grid CTD. Used primarily for special capabilities training and GRID operations.

G172--Twilight CTD.

G173--Southern Latitude CTD.

G174--Unit Option CTD. Unit commander directed.

G180--Cargo/Passenger Handling Procedures. Boom operators, loadmasters, and cargo loaders must complete this course annually to be authorized to participate in unsupervised cargo carrying operations. Boom operators and cargo loaders must complete G182, G183, and G184 as applicable to complete all requirements of G180. Aircraft commanders must complete G182 to credit G180. In-flight Passenger Service Specialist must complete the passenger handling portion of the course to fly unsupervised.

G182--Hazardous Cargo. Procedures for handling hazardous cargo. Required for aircraft commanders, boom operators, and applicable cargo loaders. (AFJMAN 24-204).

G190--Aircraft Servicing. Ensure aircrew have the knowledge to service and reconfigure the aircraft for launch. Training is required in each training cycle. This course does not qualify crews to perform maintenance tasks. This is a non-grounding event and failure to accomplish the event does not affect CMR/BMC status.

G210--Alert Start Procedures/Cartridge Start Procedures. Instruction on procedures for fast reaction engine starts using cartridges and/or APU and normal cartridge and cross-starting procedures.

G222--Hydraulic System Ground Course (SYS 1).

G223--Flight Control Ground Course (SYS 2).

G224--Fuel System Ground Course (SYS 3).

G225--Electrical System Ground Course (SYS 4).

G226--Environmental Ground Course (SYS 5).

G227--Engines, Propulsion, and APU Ground Course (SYS 6). OC-135 navigators must accomplish APU portion of SYS 6 only.

G230—Crew Resource Management (CRM) Refresher. Each crewmember is required to participate in one training session every 24 months IAW AFI 11-290, *Cockpit/Crew Resource Management Training Program*. Waiver authority for this requirement is the WG/CC. This is a grounding event (waiver authority is the WG/CC) however, failure to accomplish the event does not affect CMR/BMC status.

G231--Initial CRM. Aircraft and crew-specific CRM training conducted IAW AFI 11-290, *Cockpit/ Crew Resource Management Training Program*. If initial CRM is not accomplished at the formal school, it must be accomplished within 1 year of reporting to home station. Dual log with G230 for AFORMS tracking purposes.

G232--Flight Instructor CRM Training. All flight and simulator instructors will complete instructor specific CRM training. This training will normally be accomplished as part of the instructor upgrade program. Courseware must build upon the previous blocks of training, both to reacquaint candidates with CRM fundamentals and to maintain continuity of terminology and techniques. Personnel may conduct this training at operational units, flying training units, or a combination, as required. Training will include, but is not limited to, proper use of AF Form 4031, CRM Skills Criteria Training/Evaluation. See AFI 11-290, *Cockpit/Crew Resource Management Training Program,* for more information.

G250--Refresher Simulator. Simulator training emphasizing aircraft systems, normal and emergency procedures, and mission specific training requirements (may be termed “phase training” for some weapon systems. G256 completes this requirement.

G252--Electrics and Fuels Simulator.

G253--Engines and Pneumatics Simulator.

G254--Flight Controls and Hydraulics Simulator.

G258--ATD Difference Training Profiles.

G260--Instrument Simulator Sortie. Simulator training focused on instrument procedures.

G261--Normal procedures simulator.

G262--Aerodynamic simulator.

G263--Copilot 3 Engine simulator.

G264 –Instructor Pilot Requalification Simulator.

G270--Tactics Simulator. Tactical mission scenario including a threat brief, threat awareness and avoidance, crew coordination, and tactical maneuvers. This training will also include familiarization of aerodrome procedures specific for the base the crew is deploying to (if applicable). Training should include a full crew complement (if feasible). Units will establish a weapons/tactics academic training program to satisfy qualification and continuation training requirements. Training is required in each training cycle. Audiovisual programs may be used in place of academic instruction. Training should include:

RC-135 signature management to include AFTTP 3-1V1, *Mission Employment Tactics General Planning and Employment Considerations,* techniques/procedures, surface-to-air, and air-to-air threats.

Nuclear weapons to include description and effects, safe escape, and flash blindness protection.

G280--Small Arms Training. Academics and firing range exercise. Includes use of force. Live fire or firearms simulator training required annually. Simulated training may only be used once every two years. Aircrew will maintain qualification on all unit assigned small arms. Training will be according to AFI 36-2226, *Combat Arms Training and Maintenance (CATM) Program*, and AFI 31-207, *Arming and Use of Force by Air Force Personnel*. This is a non-grounding event and failure to accomplish the event does affect CMR/BMC status.

G300--Unit Specific Training Event.

G330--Unit Mission Brief. A course/briefing on the overall mission of the unit. The last portion of this course will relate the individual's responsibility to the unit mission.

G632--Security Clearance.

G633--Special Survival Refresher Course.

"I" Events (HQ AIA):

I001--Safety. Aircrew Safety/in-flight hazards/actions/reporting.

I002--Equipment/Systems Knowledge. Knowledge of reconnaissance equipment and related systems.

I003--Equipment/Systems Operation. Equipment operation according to prescribed procedures and directives.

I004--Tactical Planning. Tactics training/plan development considering sortie objectives, specific action points, likely threats and aircraft/crew coordination and capabilities. Includes equipment and materials requirements and availability.

I005--Employment. Application of tactics, operational procedures, equipment usage, and adaptability to meet mission objectives.

I006--Data Collection. Aircraft positioning and equipment configuration for data collection. Use of commands, search modes and procedures for manual and computer-aided systems.

I007--Data Recording. Mission recording equipment training to include settings, procedures and annotation.

I008--Data Dissemination. Data dissemination training in all available mediums. Training includes consumer requirements for indication and warning information in timely and accurate manner.

I009--Collection Debrief. Procedures/materials accountability/mission debrief accuracy.

"LS" Events:

Note: See AFPD 11-3, *Life Support*, AFI 11-301, *Aircrew Life Support Program* and ACCI 11-301, *Aircrew Life Support Program* for more guidance.

LS01--Local Area Survival (Initial). This training is an initial only event conducted prior to the first flight at home station to familiarize aircrew members with local equipment requirements, and rescue procedures. A lesson plan will be developed to include all aspects of survival and rescue procedures within the local area.

LS02—High Threat Combat Survival Training (HTCST). This training is intended to provide a scenario in which the survivor can practice procedures with actual survival equipment and should begin after

landing and continue through rescue/recovery. The exercise may vary from a local survival situation to a combat SAR and should be tailored to individual experience levels, local conditions and unit mission. The OG/CC will determine if crewmembers are required to attend LS02 or LS011.

LS03--Water Survival Training (WST). Training for each crew member with all weapon system specific flotation devices and components available during an over-water emergency.

LS04--Aircrew Chemical Defense Equipment Training (ACDE). Provides aircrews with initial and recurring training in the use and wear of the aircrew chemical defense ensemble for use in a chemically toxic/hostile environment. Credit may be given for ACDTQT initial or recurring training in the Cockpit Familiarization/Part-task Trainer or power on ground trainer.

LS06—Aircrew Life Support Equipment Training (ALSE). Provides training on the use of available life support equipment and the principles, procedures, and techniques needed to permit survival in varying climatic conditions and environmental regions to meet the unit's mission needs.

LS08--Egress (Non Ejection). Training will be accomplished using the aircraft, aircraft diagram, and prepositioned aircrew life support equipment as training aids. Training will encompass location, use, donning, and/or deployment of life support equipment, egress procedures including ground egress and ditching.

LS011--Low Threat Combat Survival Training (LTCST). LTCST is a hands-on academic equipment training program designed for aircrew members whose duties do not require them to fly over enemy territory. This includes those assigned to noncombatant positions (e.g. staff position, flight surgeon). Aircrews are provided the opportunity to demonstrate their ability to use aircrew life support equipment, employ survival techniques, and rescue procedures. This training should be accomplished in a logical sequence stressing hands-on use of aircrew life support equipment, survival techniques, and rescue procedures. The OG/CC will determine if crewmembers are required to attend LS02 or LS011.

"M" Events:

M001--Sortie.

M002--Night Sortie. See FLIP for definition of darkness.

M010--Proficiency Sortie. Requirements listed below by crew position.

Must be accomplished with an IP (formal school instructors are exempt from the IP requirement). IPs may accomplish and log an M010 without another instructor's supervision. Once the exercise commences, it should not be disrupted for any other type of training. A minimum of 1.5 hours should be scheduled for this event. As a minimum, a pilot proficiency sortie will consist of the following:

Review of boldface emergency procedures.

Three instrument approaches.

Missed approach.

VFR traffic pattern (weather permitting).

In addition, the following should be accomplished when available/applicable:

Holding pattern or procedure turns (to include entry).

Circling approach.

Simulated engine-out landing (if applicable to aircraft type and weather permitting, NA copilots).

Simulated engine-out go-around/missed approach (if applicable to aircraft type and weather permitting, NA copilots).

Partial flap landing (if applicable).

If circumstances prevent completion on one sortie, credit may be taken after a second IP-supervised sortie, provided the combined activity fulfills the intent of this paragraph. Instructors should tailor each M010 to the individual pilot's needs. Particular emphasis should be placed on simulated systems malfunctions, simulated-engine out operations and instrument procedures.

Navigator. Navigators may credit a sortie when they perform navigation duties. Two navigators may credit a sortie if they accomplish sortie events on the same route segment when the mission profile requires the use of two navigators. Unit training flight instructor navigator will determine detailed sortie profile from logging and M010.

EWO. Ravens may credit a proficiency sortie only when performing primary crew member duties. Only one Raven may log an M010 per sortie in each crew position. They must accomplish either an E051 or E052 as appropriate.

IMT/SMT. Accomplish all applicable checklists and perform troubleshooting/maintenance actions in a timely manner. Configure equipment for degraded operations in an efficient manner allowing for maximum collection/equipment utilization. (dual log with M001) IMTs may credit a proficiency sortie only when performing primary crewmember duties.

M021—RAP Sortie. Sortie in a unit's mission aircraft with mission crew on-board. The sortie must accomplish unit mission specific training. Unit defined sortie to accomplish mission specific training events or an operational/contingency mission. Counts as a RAP sortie for CMR/BMC crewmembers.

"N" Events:

N045--Celestial Position. Navigator will complete a pre-computation, shoot the celestial body, calculate a celestial heading and compare to the compasses and plot the LOP. The navigator will resolve MAJOR discrepancies. N045 may be accomplished in-flight, on the ground in the aircraft or in a suitable celestial training site such as a an outdoor sextant rack. The intent is for the navigator to have a basic knowledge in this celestial skill and the procedures for operating the sextant.

N046--Celestial Navigation Leg. See chapter 5.

N047--Grid Navigation Leg. See chapter 5.

N048--Degraded Navigation Leg. See chapter 5.

N049--Systems Navigation Leg. See chapter 5.

N050—RC-135U/V/W Reconnaissance Orbit Area. See chapter 5.

N051—OC/WC-135 Mission Navigation Leg. See chapter 5.

N052—RC-135S Data Run Procedures. See chapter 5.

N070--Degraded Systems Navigation Leg. See chapter 5.

N090--Control Time/Position Exercise. May be flown in conjunction with any navigation leg or during general navigation.

N100--INS Airborne Alignment (RC-135). Operating the ASN-121 in DR mode for 15 to 30 minutes is recommended before accomplishing a manual or auto air alignment (may be accomplished from initial takeoff or while airborne).

N102--INS Present Position Update. As applicable and as directed by the unit training flight navigator.

N103--INS Degraded Operations. Simulates degraded operations of the AN/ASN-121 to include NAV/DR mode. Discuss system inputs to the AN/ASN-121 (GSID operation) and how their loss effects position accuracy and recon compartment system operations. Accomplish in-flight (not to include critical phases of flight).

N120--Airborne Radar-Directed Approach (ARDA). Navigator directed approach using the airborne radar system.

N130--Receiver Rendezvous. Instructors may dual log this event with N131 and N132.

N131--En route Rendezvous (receiver). Dual log with N130.

N132--Point Parallel Rendezvous (receiver). Dual log with N130.

N135--Receiver Alternate Rendezvous. Accomplish IAW the alternate rendezvous procedures outlined in T.O. 1-1C-1-14. Briefed alternate rendezvous procedures prior to flight. Log N135 when an alternate rendezvous is performed or when the navigator computes the required alternate rendezvous data prior in preparation for any receiver rendezvous (typically timing).

N136--Receiver Rendezvous Overrun Procedures. Instructors may dual log this event.

N140--Celestial Observation. Minimum of 3 celestial observations per exercise. Log no more than one N140 per navigation leg.

N175--INS Radar Present Position Update. As applicable and as directed by unit training flight navigator.

N176--INS Manual Position Update. As applicable and as directed by unit training flight navigator.

N180--Target Timing Wind Procedure. As directed by unit training flight navigator.

"P" Events:

P007--Approach to Initial Buffet and Recovery. Accomplished in the OFT only. This is a pilot procedure however, other crew positions may be required to attend P007 simulator for observation of the demonstration described in this event.

Purpose: Familiarize the aircrew with aircraft flight characteristics during an approach to stall and to teach recognition of initial buffet and proper recovery.

Procedures:

1. Compute reference speed, initial buffet speed, and maximum EPR setting.

2. Set throttles at a reduced power setting.

3. Maintain level flight. Note: Continue to trim nose-up until below Threshold speed for this demonstration. Be aware that the Trim setting during an actual approach to stall may be quite different.

4. Recover the aircraft at the first indication of initial buffet. Lower the nose, level the wings and add thrust up to the maximum computed EPR. Recover to level flight when adequate airspeed is attained. Avoid entering secondary stall/buffet during recovery.

Techniques:

1. Point out the relationship between AOA and pitch during entry and recovery (for example, 5 degrees nose high will be .5 AOA, 6 degrees will be .6 AOA, etc.).

2. Discuss the aerodynamic characteristics during initial buffet, pointing out the tremors and vibrations caused by disturbed airflow over the horizontal stabilizer.

3. Discuss relationship of initial buffet speed to bank angle, etc.

4. Demonstrate control effectiveness at slow speeds.

5. Point out that the aircraft will not stall at less than approximately 12 degrees nose high (wings level, 1G, level flight).

6. Discuss the effect of Trim settings on entry and recovery. Note: One likely approach to stall scenario results from the autopilot trimming nose-up with the auto-throttles disengaged. Pilots must be prepared to apply Nose down trim input in order to effect recovery; avoid secondary stall/buffet; and minimize altitude loss.

P010--Takeoff-Initial. All Activity from initiation of the takeoff checklist up to and including establishment of the climb configuration and airspeed. The takeoff following a Touch and Go landing is not creditable. Exception: Senior staff pilots (colonels and above) who require in-flight supervision and instructor pilots may take credit during initial takeoff or following a Touch and Go when occupying a pilot seat.

P011--Takeoff, Night.

P012--Takeoff Gyro mode.

P013--Air Refueling Overrun. Pilot accomplished procedures.

P015--Instrument Departure. Pilot will hand fly the aircraft to en route altitude and establish level flight attitude and configuration.

P018--Copilot Takeoff Duties. Perform copilot takeoff duties, to include setting takeoff power and monitoring aircraft performance and acceleration through cleanup altitude. May be accomplished in the ATD/OFT.

P026--Takeoff Climb Procedures. Pilot will hand fly the aircraft from brake release through clean-up altitude. May be accomplished in the ATD/OFT.

P027--Combat Departure. Simulator only unless directed by OPORD.

P030--Max Mode T/O, 30 Flap. Initial take-off using 30 degrees of flaps and max mode procedures. Dual log with P010.

P035--Power Management Control (PMC) Off, Takeoff.

P040--Simulated Engine Failure, Takeoff Continued (EFTOC).

Purpose: Practice procedures for losing an engine immediately after a takeoff, either initial heavyweight or after a touch and go or lightweight takeoff. Also, to demonstrate aircraft reaction to a loss of thrust causing an asymmetric condition and appropriate control inputs for recover.

Procedures:

1. Notify the crew.

2. Follow normal takeoff/rotation procedures specified in the aircraft T.O.

3. Retard an outboard engine to idle no lower than 200ft AGL.

4. Raise the landing gear after a positive rate of climb is established.

5. Accomplish the EFTOC checklist after the aircraft has reached a safe altitude and is under control. The engine may be restored after reaching traffic pattern altitude or this scenario may be used as a lead-in to accomplishing a simulated three-engine pattern.

Techniques:

1. Emphasize pitch control and drag reduction.

2. Point out the aileron displacement necessary to maintain a straight ground track.

3. Point out rudder inputs required to reduce aileron displacement.

4. Emphasize drag reduction throughout the maneuver. As the aircraft accelerates and the gear/flaps are retracted (IAW aircraft T.O. procedures), the rudder will become more effective and therefore the appropriate amount of rudder input must be continually assessed.

5. Emphasize this maneuver may be practiced as a simulated heavy weight takeoff, or may be practiced as a lighter-weight takeoff (such as a reduced thrust takeoff or touch-and-go landing takeoff).

6. If simulated from a heavyweight takeoff, ensure minimum 3-engine performance requirements are met. Emphasize the aircraft is performance limited and therefore drag/pitch control is critical for safe recovery.

7. Emphasize that additional thrust may be available when takeoff power setting is less than TRT. Use caution when adding asymmetric thrust.

P048--3 Engine Reverse Thrust Landing (If Applicable).

P050--Holding.

P051--Fix-to-Fix Procedures. Includes fix-to-fix navigation, course interception, and general radio aid navigation.

P060--Penetration (Published).

P061--En route Descent.

P062--High Penetration Approach.

P070--Instrument Approach.

P080--Instrument Approach (Auto/Coupled). Dual log with applicable approach P100 or P110.

P100--Precision Approach. Dual log with P070 when accomplished inflight.

P101--ILS Approach. Dual log with P070/P100 when accomplished inflight.

P102--ILS Approach (Gyro mode). Dual log with P070/P100 when accomplished inflight.

P103--PAR Approach. Dual log with P070/P100 when accomplished inflight.

P110--Non-Precision Approach. Dual log with P070 when accomplished inflight.

P112--TACAN/VORTAC/LOCALIZER Approach. Dual log with P100/P110.

P113--ASR Approach. Dual log with P100/P110.

P130--Circling Approach. Dual log with type approach flown.

P135--NDB Approach. Dual log with P100/P110.

P140--Visual Traffic Pattern. A maneuver flown to position the aircraft for landing from the visual traffic pattern.

P160--Missed Approach. Must be accomplished in the manual mode.

P170--Approach and Go-Around (Simulated Engine Out).

Purpose:

To demonstrate thrust and directional control requirements during a three engine go around with rudder power operative or inoperative.

Procedures:

1. Notify the crew.

2. Compute approach and landing data, including go-around EPR settings, approach speeds, and in-flight minimum control speeds for rudder power operative/inoperative (as required).

3. Ensure aircraft is at or above the applicable in-flight minimum control speed prior to accomplishing demonstration. Turn rudder power off if applicable.

4. Retard the throttle on a selected engine to idle.

5. Continue to fly aircraft; perform applicable BOLDFACE/emergency action procedures and call for appropriate checklists.

6. Apply rudder trim as necessary during pattern and approach.

7. Remove rudder trim inputs on final approach.

8. Complete the approach to planned go-around.

9. Reconfigure the aircraft for normal flight once at traffic pattern altitude.

10. Zero out the rudder trim – if a new input was applied.

11. Restore the simulated failed engine.

12. Turn the rudder power switch back on and reengage the yaw damper (if applicable).

NOTE: Ensure there are no rudder inputs when rudder power is restored.

Techniques:

1. Emphasize the need to fly the plane first.

2. Demonstrate the correlation between thrust and airspeed and rudder requirements.

3. Show how effective rudder trim can be in reducing the amount of pressure you have to hold on the rudder pedal with rudder power inoperative.

4. Discuss in-flight minimum control speed in-depth, emphasizing the go-around portion of the approach as the point where the definition is most closely met with rudder power inoperative.

5. During the go-around, demonstrate anticipating the rudder requirement by leading the go-around thrust input with rudder.

6. Discuss the application of thrust during the go-around.

7. When you reach the go-around EPR setting.

8. When you have input the maximum amount of rudder available.

9. When you have achieved a desired climb rate-- the objective should be to achieve a moderate climb rate and allow the aircraft to accelerate.

10. Discuss methods to regain airspeed if aircraft is below in-flight minimum control speed.

P171--Approach and Go-Around, Simulated Engine Out, Rudder Power-Off. See P170 for procedures.

P172—Approach and Go Around, Simulated Engine Out, FCAS Off.

P180--Approach and Landing (Simulated Engine Out). Dual log with P190.

P190--Landing.

P191--Landing, Full Stop (Reverse Thrust, If Applicable. Landing rollout will be made using reverse thrust of applicable engines. Loss of currency will not cause loss of CMR status. Currency may be updated in the OFT. Dual log with P190.

P192--Landing, Night. Dual log with P190.

P194--Landing, 30 Degree Flaps. Landing with 30 degree flap setting under the restrictions in AFI 11-2RC-135V3, *RC/OC/WC/TC-135 Operations Procedures*, and applicable aircraft operating guidance.

Purpose: Demonstrate the landing/flight characteristics of the aircraft when landing at 30 flaps.

Procedures:

1. Brief normal touch-and-go procedures. Comply with requirements for landing and touch-and-go landings (weather requirements, gross weight, etc.).

2. Compute landing data to include 30 degree flap flare distance and stopping distance to ensure runway available exceeds runway stopping distance requirements.

3. Fly a normal approach and landing with normal touch-and-go procedures.

Techniques:

1. Move GPWS Override switch to OVRD (if applicable) to avoid nuisance GPWS warnings

2. Point out higher speed required for approach, with commensurate higher turn radius.

3. Show reduced power requirement on final due to reduced drag with 30 degrees of flaps.

4. Discuss power reduction point for landing in order to achieve 30 degrees flaps Threshold speed and touchdown speed.

5. Point out the increased flare distance and landing ground roll due to 30 degrees flaps.

6. Point out the flare distance for most operations will exceed the designated touchdown zone of the first 3000 feet of the runway. Do not attempt to duck-under or aim short to land short of the computed flare distance.

7. Reset the GPWS Override switch to normal during climb-out.

8. Point out only small trim change and one “notch” flap position change during touch-and-go.

P195--Landing, Simulated Engine Out, 4 engine Takeoff. Dual log with P190.

P196--Landing, Full Stop, Night.

P197--Landing, Full Stop. Dual log with P190.

P198--Opposite Seat Sortie. Profile will include, as a minimum, a preflight, copilot initial takeoff and climb-out checklist duties, and an instrument approach and landing.

P199--Opposite Seat Landing (touch and go or full-stop). Dual log with P190.

P200--Touch and Go Landing. Dual log with P190.

Purpose: To conduct upgrade, currency, and landing proficiency training.

Procedures:

1. Compute landing data, including touch-and-go EPR settings and minimum rotation speed

2. Brief the crew. Comply with requirements for landing and touch-and-go landings (weather requirements, gross weight, etc.).

3. Review touch-and-go procedures with the other pilot.

4. Touchdown at a point that will allow for a safe touch-and-go landing (pilots must consider the landing distance in accepting a landing beyond the computed flare distance). 5. Pilots should be aware that flare distances of heavyweight aircraft and especially at flap settings of less than 50 degrees can easily be outside of the designated touchdown zone.

6. Follow applicable aircraft technical order procedures in accomplishing the touch-and-go landing.

7. Follow normal climb-out procedures.

Techniques:

1. Discuss the inherent dangers in both landing and takeoff while briefing the mission. 2. Discuss the influence of such factors as runway condition, runway length, calculated ground roll, actual landing point on the runway, and any additional factors that would influence determination of go/no-go point during the touch-and-go landing.

P205--Landing Attitude Demonstration.

Purpose. Demonstrates the proper landing picture, landing attitude, and the proper transition from approach to the landing flare.

Procedures:

1. Brief approach and comply with requirements for landing and touch-and-go landings (weather requirements, gross weight, 4 engine only, etc.).

2. Hold the landing attitude as you fly down the runway.

3. Initiate normal go-around procedures no later than 2000 feet remaining on the runway.

Techniques:

1. Advise the SOF, if applicable, you are performing a landing attitude demonstration.

2. Point out where the normal power pull would occur in transition from approach to landing.

3. Maintain power in transition from approach to landing flare.

4. Touching down is not required in this demonstration, maximum effect is obtained by setting and maintaining the landing attitude.

5. Stress aim point control and centerline control when transitioning to visual references.

6. Discuss the importance of airspeed control and airspeed management in a good landing.

7. On downwind, show where the horizon is in the windscreen. Point out that this is where the horizon will be during the landing flare.

8. Emphasize to the student pilot/pilot not flying how rudder is used to keep the nose tracking straight and aileron is used to kill drift.

9. Apply power as required to maintain level flight while performing the maneuver.

P210--Touch and Go Landing IP Duties. Dual log with P010, and P190, or IP student will monitor a student touch and go landing.

P240--Landing Gear Alternate Procedures/ Emergency Extension.

P250--Main Flap Emergency Operation. Accomplished via ground lesson plan with an instructor pilot and system mockup or OFT if available. Electric flap operation in the aircraft may be completed in-flight or on the ground with an instructor pilot.

P260--Have Quick Radio Procedures. Training consists of properly configuring the radio for Have Quick and making at least one transmission and reception using Have Quick mode of operation with any source. The TOD should be updated from a ground station master clock whenever possible. May be accomplished on the ground.

P270--Secure Radio Operation. Training consists of properly loading secure voice code and making at least one transmission and reception using secure voice with like-equipped aircraft. May be accomplished on the ground.

P280--Aircrew Chemical Defense Task Qualification Training (ACDTQT). An exercise emphasizing hands-on training, dressed out in partial chemical defense (CD) ensemble. The purpose of the exercise is to enable crewmembers to become aware of their limitations while wearing the equipment. Performance limitations due to heat stress, fatigue, hyperventilation, limited dexterity, and hampered communication can all be experienced during this exercise. Observers must closely monitor crewmember actions during the exercise. If a crew member experiences difficulties such as excessive thermal stress, hyperventilation, headaches, etc., and either the observer or crew member believes it is unsafe to continue, the equipment will be immediately removed. The following aircrew CD items will be used:

Flying helmet (if applicable).

MBU-19/P hood/mask assembly.

Filter pack with filters/CQU-7/P blower assembly with filter canisters and batteries.

MXU-835 intercom assembly.

Filter pack suspension straps.

Glove set (cotton, butyl, Nomex).

ACDTQT should be accomplished in a simulator with visual displays, provided a simulator is available. If accomplished in a simulator, ATS instructors will observe the exercise, no other supervision is required, and no restrictions apply on who/how many crew members may wear the gear.

If performed in the aircraft, only one, primary front-end crewmember will be dressed out at any time.

An instructor pilot occupying the copilot seat will supervise the AC. The copilot will be supervised by an instructor pilot/experienced AC (determined by the squadron commander) in the pilot seat. A safety observer crewmember will occupy the jump seat. Pilots will don the gear and accomplish at least one take-off, approach, and landing, and complete all crew position checklists associated with approach and landing.

Navigators will be supervised by another crewmember and wear the gear for a minimum of 20 minutes while performing navigator duties.

EWOs and IMTs supervised by another crew member will wear the gear for a minimum of 20 minutes while performing required duties. EWOs and IMTs may perform this event during a power-up ground trainer.

Prior to being scheduled for this event, each aircrew member must have completed LS04.

P290—APU or JAFSU Operations.

P300--Cargo Loading. In-flight Cargo load mission. See applicable event G180.

P310--Instructor/Evaluator Duties/Techniques. Creditable whenever instruction or AFI 11-2RC-135V2, *RC/OC/WC/TC-135 Aircrew Evaluation Criteria* evaluation is performed in-flight or in the training device. Instructors may receive credit while instructing unlike specialties in common core events.

P311--Flight with an Instructor.

P340--Briefing and Control of Passengers.

P345--In-flight Adjustment and Security of Load.

P355--Trouble Shooting Air Refueling Equipment Malfunctions. Demonstrate trouble shooting analysis and corrective actions procedures for ARR systems malfunctions from Unit developed training scenarios. Need not be accomplished with an instructor.

P341--Mission Documents. Publications, logs, forms and formats required to complete assigned peacetime/EWO mission.

P360--Mission Planning/Briefing/Critique.

P361--Preflight. Crew member activity accomplished in preparing aircraft and or systems for flight/mission operations. For Pilot Instructor Upgrade creditable if accomplished from right seat as part of upgrade training.

P364--Auto Pilot Off, Cruise.

P366--Checklist Procedures. Each crew member should become familiar with technical order expanded and abbreviated checklist procedures that govern actions during each phase of flight.

P367--Crew Coordination. Activity involving in-flight crew coordination between 2 or more crewmembers applicable to accomplishing aircrew duties during both normal and emergency operations/procedures (actual or training).

P369--Aircraft/Mission Equipment Operation. Demonstrated proficiency in operating aircraft systems and or mission systems equipment. RC/WC/OC/TC-135 aircraft.

P380--Spoiler Demonstration.

Purpose: To demonstrate roll rates and aileron forces required for different spoiler settings, and also the reduced lateral performance which occurs after a spoiler or hydraulic systems failure.

Procedure:

1. Make normal turn with spoilers ON. Note roll rate and elevator back pressure.
2. Make turn with inboards CUTOUT. Note slower roll rate and reduced back pressure.
3. Make turn with outboards CUTOUT. Note slower roll rate and increased back pressure.
4. Make turn with all spoilers CUTOUT. Note very slow roll rate, normal back pressure.
5. Make turn with spoilers NORMAL, speed brakes at 30 degrees. Note fast roll rate.
6. Make turn with spoilers NORMAL, speed brakes at 60 degrees. Note normal roll rate and back pressure.
7. Reset speed brakes to zero degrees.

Techniques. Determine NRT for current altitude. Consider setting pointers on EPR gauges as a reminder.

P382--Trim Demonstration. May be demonstrated with autopilot on or off.

Purpose: To demonstrate control column displacement during different "out of trim" conditions, and the operation and limitations of the trim system.

Procedures: Out of Trim/Manual Trim Demonstration:

1. Notify crew.
2. Establish trim condition and note control column in centered position.
3. Trim approximately one unit nose down, maintaining altitude with elevator.
4. Continue maintaining altitude with elevator while trimming an additional one to two units nose down (do not trim full nose down).
5. Ensure the control column is not in centered position.
6. Set stabilizer trim switch to the cutout position.
7. Maintain level flight with elevator while other pilot trims with manual trim wheel.
8. Considerable force may be required and control column pressure may need to be reduced to enable manual trimming.

9. Set stabilizer trim switch to "normal" and trim for level flight.

Autopilot Trim Demonstration:

1. Set stabilizer trim switch to cutout.

2. Manually trim for approximately a 500 fpm climb or descent.

3. Engage autopilot yaw, roll, and pitch axes, and engage altitude hold.

4. Observe the autopilot trim for level flight.

5. Disconnect the altitude hold and use the autopilot pitch knob to trim nose up and nose down.

6. Set stabilizer trim switch to "normal" and resume normal flight.

Techniques:

1. Point out the difference in control column alignment when in trim and when out of trim.

2. Discuss the three independent ways of trimming the aircraft, through stab trim, manual trim, and the autopilot trim motor.

P383--Simulated Jammed Stabilizer. IP must accomplish full demonstration. AC must perform the proper steps to accomplish a landing.

Purpose. To demonstrate how to trim the aircraft when the three normal means of trimming are inoperative

Procedures:

1. Notify crew.

2. Comply with requirements for landing/Touch-and-Go landings (weather requirements, gross weight, etc.).

3. Trim aircraft to pattern speed with flaps set at 20 degrees on downwind. (Note Trim Setting in case of subsequent trim actuation).

4. Set inboard spoiler switch to cutout.

5. As flaps are lowered to 30 degrees, 40 degrees and 50 degrees of flaps, trim with speed brake lever to correct pitch down tendency.

6. Fly a normal approach.

7. After the aircraft is on the ground, return the speed brake lever to zero and reset the inboard spoiler switch to normal.

Techniques:

1. Point out increased power requirements due to the drag from the speed brakes.

2. Emphasize to the pilot flying not to trim, but to simulate stabilizer trim is inoperative.

3. Point out tendency to over-control on lateral inputs due to intermediate speed brake position.

4. Discuss go-around considerations with speed brakes up. Remember you’re using the speed brakes for trim. If you lower the speed brakes to zero on a go-around, you will lose your nose up trim.

5. Discuss possible landing considerations.

"Q" Events:

Q001--Open Book Qualification Exam.

Q002--Closed Book Qualification Exam.

Q003--Mission Qualification Evaluation.

Q004--Difference Qualification Evaluation.

Q005--ATD Evaluation (Qualification/Upgrade).

Q006--Closed Book. 67 IW event.

Q008--Instructor Evaluation.

Q010--SIOP Certification. This is a non-grounding event however failure to accomplish the event does affect CMR status (N/A BMC).

Q011--Operational Certification (includes initial). Required for CMR aircrew; BMC aircrew as determined by SQ/CC. Continuation verification updates aircrew on their squadron's wartime and operational missions. Each crewmember will participate in a squadron initial/continuation verification item as a briefer, board member, or seminar participant to log this event. Aircrew may also receive recurring verification credit by serving as a member of a mission planning cell designated to a FLAG exercise. Suggested briefing guide is at Attachment 3.

Q012--Copilot A/R, T and G Supervision Certification (Aircraft Commanders).

Q014--Difference Certification.

Q015--Special Mission Qualification.

Q017--Treaty Orientation Course. Defense Threat Reduction Agency (DTRA) sponsored course to familiarize crewmembers with the OPEN SKIES Treaty in order to perform observation missions.

Q016--Conventional/Mobility Certification. As required by SQ/CC.

Q020--Air Refueling Eval. Evaluation for crewmembers accomplishing in-flight receiver air refueling activity.

Q060--EMCON 3/4 Certification. Squadron Commander authorization to accomplish EMCON 3 procedures must be demonstrated in the aircraft. Receiver pilots and boom operators receive instruction on EMCON 3 and 4 procedures. EMCON 3 may be demonstrated in the aircraft. Both 3 and 4 may be demonstrated in the simulator or taught as a ground course. The 338 CTS/CC will certify all 55th wing crewmembers when training is completed in the 338 CTS. The 67 IW will determine requirements for Q060.

Q095--Flight Publications Check.

Q110--Personal Reliability Program.

Q170--Flight Evaluation Folder Review.

"R" Events:

R006--Receiver Air Refueling, Autopilot off, Night. Same as with day A/R, all axis of the tanker autopilot must be disengaged and air refueling contact(s) must be practiced to satisfy receiver training requirements. The receiver pilot must practice closure and contacts for a minimum of 10 minutes. Dual log with R010.

R010--Receiver A/R. Receiver pilot should accomplish 10 minutes of toggles-engaged time. Toggles engaged time does not apply during tanker autopilot off refueling or during HHQ missions.

R011--Receiver Air Refueling, Indoctrination. Consists of instructor supervised air refueling for the copilot (In right seat) to assure that the copilot is capable of taking control of the aircraft to safely clear the tanker in an emergency and execute a breakaway maneuver.

R012--Receiver Air Refueling (Day) dual log with R010.

R013--Receiver Air Refueling Overrun.

R020--Receiver Air Refueling (Night). Instructors will certify in the training folder that the qualification student is able to stabilize in the pre-contact position and establish contact for at least one minute without an inadvertent disconnect in day A/R prior to progression to night air refueling. During the hours of darkness, conduct practice in rendezvous, closure, and contacts until able to maintain contact for 5 minutes without an inadvertent disconnect. Dual log with R010.

R030--Receiver Air Refueling (Heavyweight). Consists of practice air refueling including closure and contacts with an airplane gross weight of at least 250,000 pounds during some portion of the air refueling. Dual log with R010.

R033--Rendezvous. Flight instructors may dual log any training rendezvous instruction. Any type air refueling rendezvous (e.g. receiver, tanker or en route).

R040--Receiver Air Refueling Breakaway/Practice Emergency Separation. Initiated with the receiver in the air refueling envelope. Pilots must demonstrate proficiency in executing the breakaway. Copilots must demonstrate proficiency in copilot procedures while the pilot executes the breakaway. Navigators must demonstrate proficiency in navigator duties during a breakaway.

R041--Tanker Air Refueling.

R042--Tanker Rendezvous.

R043--Tanker En Route Rendezvous.

R044--Tanker Point Parallel.

R045--Tanker Air Refueling Breakaway.

R046—Tanker Air Refueling Autopilot Off.

R047 Tanker Air Refueling (Heavyweight).

R050--Receiver Air Refueling Tanker Autopilot-Off. All axis of the tanker autopilot must be disengaged and air refueling contact(s) must be practiced to satisfy receiver training requirements. The receiver pilot must practice contacts for a minimum of 10 minutes. Dual log with R010.

R165--Radio Silent Air Refueling. Receiver pilots and boom operators must demonstrate their ability to air refuel using radio silent procedures to an instructor during actual air refueling. Any type receiver may be used for this training. The individuals training records must show qualification in radio silent air refueling prior to achieving mission qualification status and participating in EMCON operations. Dual log with R010. Includes radio silent practice emergency separation.

R220--Manual Boom Latch (MBL). Co-pilots duties include checklist use and execution of the manual holding and releasing of the toggles. AC/IP duties are to establish and maintain contact under MBL conditions. Dual log event with R010.

R221--Air Refueling Limits Demonstration. Receiver pilots. Dual log with R010.

R223--Pilot Director Lights Out (PDL) Air Refueling. Dual log with R010.

"T" Events

T001--Safety Practices. Electrical/Electronic safety procedures to include electrostatic discharge (ESD), high voltage safety and RF radiation safety.

T002--AFSC Requirements. Fulfill the requirements of all ground formal technical schools and career development courses for awarding the skill level assigned to individual crewmembers in X2AXXX career fields.

T003--Mission Material/CTK Procedures. The proper issuing, handling, control, and use of all issued materials and Consolidated Tool Kits (CTK) during ground and airborne operations IAW applicable directives.

T004--Special Equipment Operations/Procedures. Capability to perform operations/ maintenance procedures, as required, for interim systems or interim system changes, IAW applicable technical orders, manuals and directives.

T005--IMT Data Run Procedures. The conduct of all operational/maintenance actions necessary for the successful collection of data in a mission area or simulated mission area.

T006--Security Procedures. Proper accomplishment of procedures to generate, classify, transport, declassify, and clear data, documentation and equipment IAW applicable directives.

T007--Quick Response Crew (QRC) Procedures. Procedures necessary for a crewmember to be on pager or telephone alert with a rapid response to aircrew deployment duties as determined by this unit.

T008--Optics Care and Handling. The proper care, cleaning, handling, and use of optical and electro-optical components and materials in the ground or airborne environment.

T009--Optical Systems Operations/Procedures. Proper operation and maintenance procedures of optical and electro-optical systems and subsystems IAW applicable technical orders, manuals and directives.

T010--Digital Distribution Systems. Systems which generate, transmit, transfer, store, or reformat data for use by other systems of subsystems.

T011--Laser System Operations/Procedures. Operations maintenance procedures for systems or subsystems with a laser(s).

T012--Laser System Safety. Safety procedures applicable to laser systems and subsystems, Ref AFI 11-220, *Reconnaissance Flight Rules and Procedures*.

T013--Film Based Camera Operations Procedures. Consists of film handling, care, loading and downloading. As well as the operations and maintenance of systems utilizing film.

T014--Foreign/Domestic VIP Briefing. The setup of an aircraft for specialized training and briefing.

T017--Data Transmission Systems. Consists of operations and/or maintenance of systems designed to transmit data over secure or non-secure communications systems.

T018--Training Documentation. Proper completion of all training documents for non-rated crewmembers. This includes AF folder 623.

T019--Preflight/Post-flight Procedures. All maintenance procedures necessary to prepare or stand down the mission compartment of aircraft.

T020--Aircraft A/C System. Demonstrated proficiency in knowledge of system operations and limitations, controls and indicator gauges, and system airflow.

T021--Mission Equipment Location. Demonstrated familiarity of all position and equipment locations onboard aircraft maintained by the IMT.

T022--Power Distribution System. Demonstrated knowledge of functions, operations and locations of aircraft generators, transformer rectifiers, converters, and circuit breaker panels. Demonstrated proficiency in malfunctions of system.

T023--Maintenance Station Operations. Demonstrated proficiency of all applicable LRU functions, locations, and operations. Demonstrated proficiency of signals routing and isolation of malfunctions. Monitoring of injected of environmental signals and other mission requirements.

T024--Mission Compartment Test Equipment. Demonstrated proficiency of proper use of O'scopes, spectrum analyzers, frequency generators, pulse generators, power meters, and other general and special purpose test equipment.

T025--Magnetic/Digital Storage System. Demonstrated proficiency knowledge of disc drive, analog and digital tape recorders/reproducers, digitizer, and other storage systems.

T026--RF Distribution System. Demonstrated knowledge and proficiency of all applicable antennas, multi-couplers, wave guides, antenna switch assemblies, pre-amps power amps/distributors and other RF plumbing used by associated mission equipment, and by-pass inject capabilities.

T027--IF/Video Distribution. Demonstrated knowledge of all IF/VIDEO sources, IF and video matrixes and associated LRUs.

T028--System Calibration Tests. Demonstrated proficiency of LRU built-in tests (BIT). Demonstrated knowledge of automatic system self test and calibrations generation of manual signals as per mission requirements from maintenance position.

T029--Direction Finder (DF) Receiver Systems. Demonstrated proficiency of all DF/Receiver system LRU locations, functions, control and signal flow. Demonstrates proficiency in operation and maintenance of DF/Receiver system.

T030--Automatic Collection Systems. Demonstrated proficiency of all automatic collection system locations, power distribution, controls, displays, and signal flow. Demonstrated proficiency system theory of operation and modes of operation, and malfunction analysis and recognition.

T031--Manual Collection Systems. Demonstrated proficiency of all LRU locations, functions, controls, and displays and all associated required mission equipment. Demonstrated knowledge of operation and maintenance of all applicable LRUs.

T032--Computer Systems. Demonstrated proficiency of all computer systems and subsystems locations, functions, power distribution, and signal flow. Demonstrated knowledge of operation and maintenance of computers and local area networks (LAN). Demonstrated proficiency in proper electronic static discharge (ESD).

T037--Flight Phase Operations. A coverage of issues, rules and procedures to be knowledgeable of prior to an individuals first flight. This course is for those non-rated crewmembers not receiving prior flight training at a formal school and is airframe specific.

T040--Timing and Reference Signal Distribution. Demonstrated proficiency of all navigational data, timing signals and reference signals used by ELINT systems. Demonstrated proficiency of system theory and modes of operation, malfunction analysis and degraded operations.

T041--Blanking Systems. Demonstrated proficiency of all blanking systems. Demonstrated knowledge of operation and malfunction analysis.

T042--LRU Locations. Demonstrated proficiency in locating all LRUs and associated circuit breakers of a particular system/subsystem.

T043--Signal Flow. Demonstrated proficiency in tracing signal flow through all components of a system/subsystem. Can give a basic description of each associated LRU and can identify specific frequency ranges, input/output signals, tasking/command routing, related system commands, front panel controls and indicators, or subsystem capabilities according to each duty position job qualification standard (JQS).

T044--Test/Signal Routing. Demonstrated proficiency in running automatic test routines and/or generate and manually route test signals through the system/subsystem. Can identify and use applicable maintenance subsystem commands to effect routing of signals and has an understanding of and can locate associated maintenance tables.

T045--System Operation. Demonstrated proficiency in effectively and correctly operating the particular system/subsystem.

T046--Isolate and Correct Malfunctions. Demonstrated proficiency in identifying equipment malfunctions and correcting as required to restore the maximum system capability possible, or determine and brief what reduced capabilities exist. Can come to sound logical conclusions throughout the troubleshooting process and explain all actions.

T047--Interpret Subsystem Operation. Demonstrates an in-depth knowledge of system/subsystem theory of operations to include all applicable system signal characteristics, other subsystem tie-ins, or associated commands, according to the individual duty position JQS.

T048--Perform Under Reduced Capabilities. Demonstrated proficiency in making assessments and briefing other crewmembers on system limitations existing during subsystem failures. Aircrew member may provide “work-around” to redundant systems to provide the maximum system capability to the operators.

“XX” Events:

AA01--Qualification Check. Used for SSQT and other non-mission ready qualifications.

AA02--Qualification Check, Simulator.

AA11--Instrument Check.

AA12--Instrument Check, Simulator.

AA21--Combined Qualification and Instrument Check.

AA22--Combined Qualification and Instrument Check, Simulator.

GA02 Survival, Evasion, Resistance, and Escape (SERE) Code of Conduct Continuation Training (CoCCT). SERE CoCCT will be conducted IAW AFI 36-2209, *Survival and Code of Conduct Training*; ACCI 11-301, *Aircrew Life Support Program*; and ACCI 14-105, ACC *Unit Intelligence Mission and Responsibilities*. SERE CoCCT will be a coordinated intelligence, life support, and survival effort.

PP01--Flight Physical.

PP11--Physiological Training. IAW AFI 11-403, *Aerospace Physiological Training Program*, and MAJCOM supplements. Aircrew member is grounded until training is completed however failure to accomplish this event does not affect CMR/BMC.

RR01--Flight Records Review.

SS01--Survival Training (S-V-80-A).

SV83--Special Survival Training (S-V-83-A). Follow-on SERE training for selected units.

WW01--Water Survival Training (S-V-90-A).

Additional Event Identifiers

Note: These identifiers may be used by units to track the associated events or items in AFORMS.

C010--CBWD Driver Operations.

C020--Massive Casualty Exercise.

C030--Mobility Briefing.

C040--Mobility Folder Review.

C050--Unit Disaster Training.

C055--Military Equal Opportunity Newcomers' Orientation. See AFI 36-2707, *Social Actions* for currency requirements.

C060--Standards of Conduct Briefing.

C061--Passport.

C062--Base Populace Briefing.

C063--Newcomer Substance Abuse Awareness Briefing. See AFI 44-121, *Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program*.

C064--Newcomers Social Actions Briefing.

C065-- Protection of the President and others. IAW AFI 71-101V2, *Protective Service Matters.*

C066--Report/Counter Human Resources Intelligence Threat Briefing.

C067--Hostile Human Intel Threat Briefing.

C068--Security and Awareness Training.

L001--Helmet Inspection.

L002--Oxygen Mask Inspection.

H010--Ergometry Testing.

H020--Dental Exam.

H030--Cholera.

H040--Flu Shot.

H050--Smallpox.

H060--Oral Polio.

H070--Tetanus.

H080--Yellow Fever.

H090--TB Tine.

H100--Meningococcola.

H110--Typhoid.

H120--Hepatitis

H130--Anthrax

Attachment 3

VERIFICATION GUIDE

A3.1. Guideline for Verification Briefings. The following outline is provided as a guideline for the development of verification briefings. These are suggested briefing items and may be tailored to the specific missions the crew will actually perform.

A3.1.1. Overview:

A3.1.1.1. Introduction (participants and briefing classification).

A3.1.1.2. Mission overview.

A3.1.1.3. Status of friendly forces (ground, air, and support).

A3.1.2. Area of Operations:

A3.1.2.1. Geography (topography, population centers, lines of communications and natural obstacles, major visual and radar significant identification points).

A3.1.2.2. Climatology (effects on unit operations and in-flight operations).

A3.1.2.3. Operating base (location, facilities, procedural constraints, strengths and limitations).

A3.1.3. Status of Enemy Forces:

A3.1.3.1. Ground forces and accompanying air defense threats (SAMs, Anti Aircraft Artillery (AAA), EC, and MIJI), capabilities, strengths and weaknesses.

A3.1.3.2. Airborne forces (numbers, locations, capabilities and tactics).

A3.1.4. Mission Employment Briefing:

A3.1.4.1. Ground operations.

A3.1.4.1.1. Minimum equipment requirements.

A3.1.4.1.2. Weather restrictions.

A3.1.4.2. Departure (contingencies, options).

A3.1.4.3. Communications and reporting procedures.

A3.1.4.4. Area entry point.

A3.1.4.5. Route of flight (threat analysis and tactical procedures, airspace review including jet route study, mission alternatives, fuel requirements, decision points).

A3.1.4.6. Mission crew briefing.

A3.1.4.7. Alternate planning/refueling options.

A3.1.4.8. Area specific requirements.

A3.1.4.9. Area exit point and recovery (safe corridor procedures, IFF procedures, alternate and emergency airfields).

A3.1.5. Escape and Evasion (if required):

A3.1.5.1. Selected Areas for Evasion (SAFE).

A3.1.5.2. SAR procedures.

A3.1.6. Essential Elements of Information/Reports:

A3.1.6.1. Essential elements of information (EEIs).

A3.1.6.2. Required reports and reporting procedures.

Attachment 4

TRAINING SHORTFALL REPORT

MEMORANDUM FOR HQ ACC/XOF

SUBJECT: xx SQ Training Shortfalls
FROM:

1. TRAINING SHORTFALLS (Training events/sorties not accomplished or locally waived. Only report those shortfalls that the unit commander feels will have a major impact on training. Generally report only those events/sorties that affect 15% or greater of the crew force.)

EVENT/SORTIE—PERCENT OF CMR/BMC CREWS (BY CREW POSITION) AFFECTED

--SPECIFIC REASON FOR SHORTFALL

--CORRECTIVE ACTION (IF ANY)

--LIMFACS

2. COMMANDER'S COMMENTS (Open forum for comments to improve the training and reporting system.)

1ST Ind, 55 OG/CC

Cc: 12 AF/DO